



Bureau of Land Management
Burley District, Idaho

September, 1983



CASSIA

RESOURCE MANAGEMENT PLAN

ENVIRONMENTAL IMPACT STATEMENT

DRAFT



Jim Sage Mountain, southwest of Malta, Idaho

A philosophy of multiple-use management underlies all the programs of the Bureau. Land and associated resources are not managed for a single use, but for several uses. The relative importance of each activity depends primarily upon the capabilities of the land and upon public demand. In multiple-use management, it is the inter-relationship and the coordination of uses and users that presents the truly critical problems in resource administration.

In all of its programs, the Bureau, like every other public resource-management agency, is both guided and limited by the demands of the public for its lands and their resources. When the demand rises for outdoor recreation on BLM-administered lands the management of those lands must, of necessity, be different from what it was when there was little or no recreation demand.

Marion Clawson

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IN REPLY
REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Burley District Office

Route 3, Box 1

Burley, Idaho 83318

CASSIA RESOURCE MANAGEMENT PLAN

September 30, 1983

Dear Citizen:

BLM's Cassia County land use effort displayed in this document is a second generation thrust at resource planning on Our Public Lands in this area.

This planning effort is geared towards meeting our mission of multiple use resource management and is an attempt to satisfy needs of all citizens of the U. S. as they concern natural resources and natural resource uses.

This plan is the first one of its kind in Idaho which combines the elements of a Resource Management Plan and an Environmental Impact Statement and should be scrutinized carefully and your comments submitted for inclusion in the final document.

There are many unique and wonderful resources in the geographic area considered by this plan. They range from the Oakley building stone to the naturalness of Jim Sage Mountain and the Silent City of Rocks, to remnants of the Oregon Trail.

A great deal of care has gone into the plan where it affects the economics of local communities and its citizens. Traditional uses of the land and its resources are also considered.

I wish to express my thanks to the many groups and citizens who have contributed time and input over the last three years towards the preparation of this plan.

I am particularly grateful to the Burley District Advisory Council who were faced with an almost impossible task of coming up with an assessment of the environmental impacts and recommendations for a preferred alternative. They did a superb job.

If there is any one request that could be made of you as a citizen, it is to please review this document and make your wishes and comments known.

Sincerely yours,

Nick James Cozakos

Nick James Cozakos

Burley District Manager

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DEPARTMENT OF THE INTERIOR

CASSIA
RESOURCE MANAGEMENT PLAN
AND
ENVIRONMENTAL IMPACT STATEMENT

DRAFT

PREPARED BY

BUREAU OF LAND MANAGEMENT
BURLEY DISTRICT OFFICE
IDAHO

1. Responsible Agency: United States Department of the Interior
Bureau of Land Management
2. Draft (X) Final ()
3. Title: Cassia Resource Management Plan and
Environmental Impact Statement

Burley District

Cassia and portions of Twin Falls, Power,
and Oneida Counties, Idaho
4. Administrative Action (X) Legislative Action ()
5. Abstract: This draft resource management plan and environmental impact statement describes and analyzes four alternatives and one sub alternative for managing 476,273 acres of public land in the Snake River Resource Area, Burley District. They are: (A) Continuation of Existing Management (Proposed Action for Livestock Grazing); (B) Production; (C) Preferred Alternative; and (D) Protection. The Sub Alternative consist of Alternative D with no livestock grazing.
6. Date Comments Must be Received:
7. For Further Information Contact:

Nick James Cozacos, District Manager
or
Jimmie Lee Pribble, Area Manager

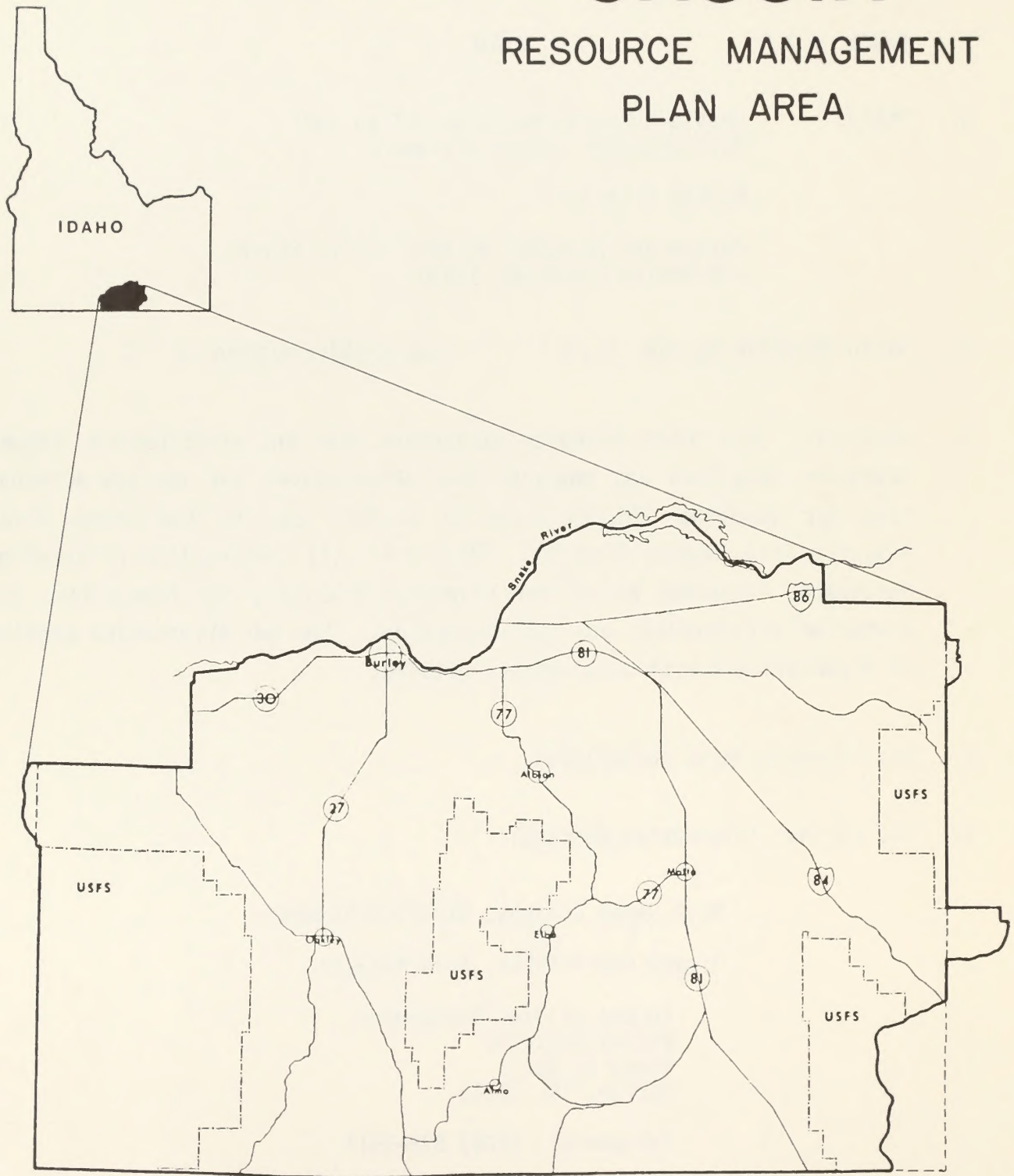
Bureau of Land Management
Burley District
Route 3, Box 1
Burley, ID 83318

Telephone: (208) 678-5514

MAP 1-1

CASSIA

RESOURCE MANAGEMENT PLAN AREA



SUMMARY

This draft environmental impact statement (DEIS) describes five potential options for managing the resources on 476,273 acres of public land in the Snake River Resource Area in the Bureau of Land Management's Burley District. Each of the resource management alternatives described provides a different framework for or philosophy of management of the public lands and resources. Each of the alternatives provides differing choices for addressing internal management concerns and for resolving public issues.

The purpose of a resource management plan (RMP) is to ensure that the public lands will be managed in accordance with the principles of multiple use and sustained yield. To achieve this purpose the planning process must be responsive to major public issues as determined through public participation, consultation, and coordination. The RMP serves as a master plan to guide Bureau management and to tell others how the lands and resources in the planning area will be managed.

The four alternatives and one sub alternative considered, in summary, are:

ALTERNATIVE A

This alternative is the "No Action" alternative allowing for the management and flow of outputs from the public lands and resources at present levels as directed by an existing 1974 land use plan.

Present management generally favors mineral development. Nearly all of the public lands are open for development of leasable and locatable minerals. Use of saleable minerals is precluded on 11 percent of the area. Local demand for sand and gravel would be met over the next 15 years. The locally significant mining industry that has developed around Oakley Stone would be protected from restrictive withdrawals that would hinder development of this resource.

Livestock grazing would be maintained at the current 6 year average use level of 58,316 AUMs. No new range improvements or land treatment would be initiated. There would be little opportunity to improve grazing management. Seventy percent of the rangeland would remain in fair or poor condition with 84 percent in static or downward trend. Over a period of years livestock grazing would be reduced by six percent to 54,575 AUMs as 33,199 acres of grazing land were transferred into private hands.

The forage need for big game would not be increased, holding mule deer and antelope to present levels. Forage production would be suppressed in nearly 75 percent of crucial deer winter range as a result of late fall and early spring grazing by livestock. There would be a general slow decline in habitat conditions for upland game. As riparian/wetland management objectives continued to be ignored this unique resource would suffer further degradation of streambank cover, water quality, and fishery potential. Threatened and endangered species would be protected in accordance with federal law. The protection of wildlife species considered sensitive by the State of Idaho would be insured at the time of project-specific site planning.

Fifty-nine percent of the woodland resource would be open to the harvest of posts and firewood. Projected 1990 demand for these products would be met. Existing management of the pinyon resource would be continued with 520 trees made available to the public biennially.

The existing erosion rate of 4.1 tons/acre/year would continue. Water quality on slightly more than half of the area streams would exceed Idaho State water quality standards. Sedimentation of reservoirs, and flood intensity and frequency would increase. Flooding along four critical floodplains would go unchecked. Springs supplying water to the City of Oakley would not receive adequate protection and periodic bacterial contamination could be expected. The status of 75 percent of wetland/riparian areas presently in fair or poor condition would decline.

Except for measures required by law and policy, actions would not be initiated to manage for cultural resources. The trend in the condition of both known and unidentified cultural sites would be downward. However, 43 miles of the Oregon Trail and other pioneer routes, as well as the City of Rocks, would be protected and managed for their historic value.

Recreation management emphasis is on the provision of dispersed motorized and non-motorized activities. Hunting opportunity would stabilize. Slightly more than 50 percent of the area is open to both wheeled and over snow vehicles with the bulk of the remaining acreage seasonally off limits to off-road vehicles to protect wintering deer and nesting sage grouse. Provisions for intensive recreation uses include archery (60 acres), trap shooting (80 acres), motocross (20 acres), and snowmobiling (160 acres).

Management of visual or scenic quality is specifically recognized. Cotterel Mountain would be managed to maintain open space and scenic vistas, 27,250 acres on Jim Sage Mountain would be designated a natural area, a travel zone would protect scenic values along the Goose Creek Road south of Oakley to the Utah border. Because of its historic and geologic significance, the City of Rocks would be managed to preserve its natural character.

A total of 33,679 acres would be transferred out of federal ownership. Major utility lines and pipelines are restricted to 53 miles of designated rights-of-way corridor while 91 percent of the area is open to location of smaller rights-of-way. Landfills may be located on 98 percent of the area and projected future demands for this important public use would be met.

This alternative calls for the most aggressive fire suppression program with a 73 percent of the area scheduled for maximum containment of wildfire. In addition this management option has the lowest acreage available for prescribed burning to manage fire to meet other resource program objectives.

The local economy would not be adversely affected by this alternative. Direct and secondary income would increase slightly in both the short and long term as would employment. Rancher income would not be affected. Of the five management options under study this alternative is the fourth best in terms of economic efficiency. There would be no measureable effect upon social conditions in the area.

ALTERNATIVE B

This alternative is directed toward the production and use of marketable resource commodities. Management emphasis is on maximizing livestock production and the harvest of woodland products. Minimal constraints are placed on mineral and energy development. Recreation emphasis is geared toward dispersed motorized recreation.

This management option places little constraint on the mineral industry. All of the area is open to locatable and leasable minerals, with greater than 99 percent open for energy resource and saleable mineral development. Middle Mountain is designated an intensive management area to accommodate present mining and facilitate future development of the Oakley Stone building resource.

Initially livestock use would be increased seven percent to 62,150 AUMs. Land treatments proposed on 117,930 acres would provide an additional 23,118 AUMs of forage. The long-term livestock use goal is 85,268 AUMs, 46 percent greater than six year (1976-81) average licensed use. As a result of land treatments, range condition and trend would improve significantly, providing the greatest percentage of good to excellent condition range of all alternatives. Over a period of years 1,588 AUMs of livestock forage would be lost as 15,308 acres are transferred out of BLM control.

At best, mule deer and antelope numbers would be held to present levels. Several factors would constrain big game populations: forage production would be suppressed on nearly 75 percent of crucial deer winter range as a result of a 46 percent increase in late fall and early spring grazing by livestock; though limited use occurs, off-road vehicle access to winter range and fawning areas would be unrestricted; 35 percent of deer winter range would be treated to increase forage production for livestock; energy exploration and development would not be restricted on winter ranges. The quality of upland game habitat would decline. Additional livestock use would increase trampling, nest desertion, and the loss of succulent forbs in sage grouse brood-rearing areas. Large scale livestock oriented land treatments and vegetative conversions would adversely affect the food source and cover for a variety of upland game species as well as decrease the prey base for many birds of prey such as the "sensitive" ferruginous hawk. There would be an areawide decline in fisheries habitat. Riparian/wetland habitat conditions for wildlife would be well below optimum, lowest of all the alternatives.

All of the woodland habitat type would be open to firewood and post cutting. Projected 1990 demand would be met. All of the highly productive pinyon type in the area of City of Rocks would be available for Christmas tree harvest providing 750 trees on a biennial basis. This would, however, necessitate harvesting within the boundary of the proposed City of Rocks National Monument.

Erosion would increase on 71 percent of the RMP area. The erosion rate of 5.1 tons/acre/year represents a 24 percent increase from the present situation. Land treatments to increase livestock forage would occur on fragile soils in the Goose Creek area. Water quality on 75 percent of the area streams, 21 percent more than at present, would exceed Idaho State water quality standards. Sedimentation would severely inhibit aquatic habitat and other downstream uses. Four critical floodplains would receive special management attention aimed at increasing plant cover and improving channel stability.

This is the least favorable of the management options for cultural resources. Impact from livestock trampling would increase on 86 percent of known sites. The areawide increase in erosion would result in a large increase in surface modification and horizontal displacement of artifacts at both known and unidentified sites.

Of all of the Alternatives this is the most favorable toward off-road vehicle use with 87 percent of the area open to wheeled and 99 percent open to over snow vehicles. ORV use would increase 26 percent from the current situation. The East Hills (3,711 acres) would be intensively managed for trail bike use. Reflecting lower wildlife numbers, hunting opportunity would decline by 28 percent.

Areas containing natural values or scenic quality are not specifically provided for under this alternative.

The alternative includes the second most aggressive land transfer program with 15,638 acres scheduled to pass out of federal ownership. Nearly all the public land is open to location of rights-of-way, and 98 percent is open to siting of landfills.

The fire management philosophy under this alternative calls for limited suppression on 90 percent of the area and allows prescribed fire to be set on 96 percent of the area to achieve resource management (forage) objectives of the range program.

Of the land use options considered, the largest increase in rancher income and long-term employment would be realized by this alternative. Relative to the other alternatives this option has the lowest economic efficiency.

ALTERNATIVE C

This alternative represents BLM's favored management approach. It is designed to provide a variety of land uses and resource outputs within the multiple use concept and sustained yield capabilities of the public lands.

This is the second most favorable alternative toward the mineral industry with 99 percent of the area open to locatable, leasable, and saleable minerals. Although energy resources may be leased and developed on 99 percent of the area, 71 percent includes seasonal closures to protect wintering deer and strutting/nesting sage grouse. No restrictions have been placed upon the building stone industry. Local sand and gravel demand would be met over the next 15 years.

Approximately 97 percent of known woodland stands would be intensively managed for the production of posts and firewood. Projected 1990 demand for these products would easily be met. Existing management of the pinyon resource would be continued with 520 trees made available biennially.

Initially livestock use levels would be increased seven percent to 62,150 AUMs. Land treatments proposed for 82,176 acres would provide an additional 15,958 AUMs of forage. The long-term stocking level goal is 78,108 AUMs, 34 percent greater than six year (1976-81) average licensed use. Primarily as a result of land treatments, the 30 percent of rangeland in good to excellent

condition would increase to 67 percent while the 16 percent in upward trend would improve to 66 percent. Over a period of years 1,270 AUMs of livestock forage would be lost as 11,749 acres are transferred out of BLM control.

The effect on wildlife, for the most part, would be positive. Forage to meet projected 1995 mule deer and antelope populations would be provided. Cover, food, and general habitat diversity would be improved on 17 percent of deer winter range scheduled for land treatment. The additional forage resulting from land treatment for both livestock and mule deer would help ease the competition on mule deer winter range. In most areas this competitive use would be for one month or less and on the average only 30 percent of the affected allotments are considered as crucial winter range. Though much of the deer winter range is open to ORV use, conditions do not favor snow machine use so impacts would be minimal.

Twenty-four percent of sage grouse habitat would be improved through increased forb production and better habitat dispersion resulting from land treatment. The habitat for the sensitive species, ferruginous hawk, would be maintained by providing a buffer zone around known nest sites. Providing for wildlife leave areas in land treatment projects would enhance jack rabbit and rodent populations, thus providing a food source for the ferruginous hawk. Fisheries habitat would receive some protection at various times of the year through livestock grazing management systems.

Erosion would decrease on 24 percent of the area. The average erosion rate of 3.8 tons/acre/year represents a seven percent decrease over the present situation. Present water quality conditions would remain static or show some improvement over the long term. Critical soils and floodplains would be protected which would reduce the threat of flooding. Because of improved management and resource monitoring, wetland/riparian conditions would remain stable or show slight improvement over the long term. Springs feeding the Oakley City water system would be managed to eliminate bacterial contamination of this water supply.

Management of cultural resources would be emphasized on 27,268 acres west of Goose Creek. Impacts from livestock trampling would increase on 79 percent of known cultural sites within the RMP area. Historic pioneer trails would be protected in the Raft River, Milner, and City of Rocks areas.

This land use option would provide a variety of motorized and non-motorized recreation opportunity. Fifty-four percent of the area would be open to wheeled vehicles, 80 percent to over snow vehicles, representing a respective four percent decrease and 27 percent increase in open acreage from current management direction. Off-road vehicle use is projected to increase 14 percent above the current level. Hunting is projected to increase 18 percent from the current level. Five special recreation management areas totaling 56,437 acres would be established to provide a variety of recreation opportunity such as hiking, horseback riding, and motorcycle riding.

The outstanding scenic quality of the City of Rocks would be protected via management objectives that would exclude future landscape modification from fences, powerlines, and land treatments. Jim Sage Mountain above 6,600 feet (11,227 acres) would be managed to protect natural area values. Protecting scenic quality is a management objective on Cotterel Mountain and along the Goose Creek travel zone south of Oakley to the Utah border.

Direction for the lands program calls for transfer of 11,652 public acres out of federal ownership. Rights-of-way may be located on almost all of the public lands although major facilities are restricted to existing locations on the 40,967 acre Cotterel unit. Ninety percent of the area is open for the location of sanitary landfills, fulfilling the public demand for this land use.

The fire management philosophy is to protect fragile resources and protect intermingled private land via the use of maximum wildfire suppression on 36 percent of the area. Limited suppression would be practiced on the remaining public lands as a mechanism of achieving resource management objectives such as increasing livestock forage production and enhancing watershed cover.

Economically this is a beneficial land use option. The income for all sizes of ranch operations would increase in both the short and long term. Employment would increase as would income. Net present worth would increase 10 percent over present management. In terms of economic efficiency, this is the third (middle) option.

ALTERNATIVE D

Management direction under this land use option is geared toward the protection and enhancement of wildlife habitat, scenic values, watershed values, and cultural resources. Non-motorized dispersed recreation is emphasized.

Livestock use levels would be set at 44,774 AUMs, 23 percent below six year (1976-81) average licensed use. As a result of lower livestock use the present 30 percent of rangeland in good to excellent condition would increase to 65 percent while the 16 percent in upward trend would improve to 51 percent.

Overall, wildlife would benefit. Forage would be provided for projected 1995 mule deer and antelope numbers. Forage competition between livestock and mule deer on winter range would be minimized. All upland game would benefit. Sage grouse populations would increase as a result of improved nesting and brood-rearing cover due to reduced livestock grazing. All riparian areas would improve, benefitting all species dependent upon these areas. Birds of prey and other predators would benefit from a more stable prey base.

Watershed conditions would greatly improve. Soil erosion would decrease from 4.1 to 3.5 tons/acre/year and erosion would decrease on 23 percent of the area. Water quality would improve with sub standard conditions minimized or possibly eliminated. Flooding and surface water yield would decline. Improved infiltration would contribute to greater aquifer recharge. The Oakley City water supply would be protected reducing the likelihood of bacterial contamination.

This option opens the smallest percent (22) of the woodland resource to post and firewood harvest. Projected 1990 public demand for these woodland products would still be met. There would be no harvest of pinyon Christmas trees. Curtailment of the pinyon harvest is aimed at preserving the largest stand of these trees in Idaho and the most northern stand in the U. S.

Slightly more than 90 percent of the planning area is open to development of leasable, locatable, and saleable minerals. There are greater restrictions on

energy resource development than in any alternative, with seasonal closures to protect wintering mule deer and nesting sage grouse on 90 percent of the area.

Present and future demand for sand and gravel would be met. All known deposits of Oakley stone would be available for development with the exception of 41 acres underlying wetland/riparian habitat.

Dispersed non-motorized recreation is emphasized. Hiking, horseback riding, and cross-country ski trails would be developed on 65,047 acres. Designations for wheeled off-road vehicles include eight percent of the public land open, 87 percent limited, five percent closed, while the status for over snow vehicles would be nine percent open, 38 percent limited, and 53 percent closed. The increase in the limited and closed designations would provide protection for crucial wildlife habitat. Off-road vehicle use would decline 15 percent from present levels. Hunting would increase 31 percent from the present use level as a result of improved wildlife habitat.

This option favors visual quality. No vegetative conversions for the benefit of livestock, coupled with a 23 percent reduction in livestock grazing would enhance scenic quality throughout the area. City of Rocks would be managed as an area of critical environmental concern to protect the outstanding scenic quality of the area as well as its geologic and historic significance. A portion of Jim Sage Mountain (24,080 acres) would be managed to protect the unroaded character and open space nature of this area. Open space and scenic values would be preserved on the 40,967 acre Cotterel Mountain unit.

Cultural resources would benefit. Seventy-eight percent of known cultural sites would be subjected to substantially less livestock trampling. Less soil erosion would translate into less artifact displacement and site damage. Pioneer trails in the Milner, Raft River, and City of Rocks areas would be protected from surface disturbing activities.

Only 560 acres (Raft River Geothermal Site) would be transferred out of federal ownership. Landfills could be located on 68 percent of the area while 94 percent would be available for location of rights-of-way. Demand for both of these land uses would be satisfied.

All sizes of ranch operations would lose income in both the short and long term. Up to 85 out of 147 ranchers may have to seek outside employment, consider ranch consolidation or sell. There would be an initial employment loss which would stabilize over the long term. Net present worth would be the highest of all alternatives while economic efficiency as measured in terms of benefit/cost ratio would be the second best.

SUB ALTERNATIVE D

This sub alternative is designed to provide a baseline from which to evaluate the consequences of various levels of livestock use. Under this land use option the management objectives for all resources except livestock grazing are the same as in Alternative D. Impacts on woodland products, minerals, and lands are the same as in Alternative D.

No livestock grazing would result in the present 30 percent of rangeland in good to excellent condition improving to 64 percent with the present 16

percent in upward trend improving to 88 percent. The condition of all riparian vegetation would improve significantly.

Projected 1995 mule deer and antelope populations would be met. All livestock/wildlife related conflicts such as forage utilization and nest trampling would be eliminated. Improved riparian habitat and water quality would benefit fisheries, waterfowl, furbearers, and other species that utilize these areas. Initial population increases for upland game, long-billed curlew, and the western burrowing owl would decline over the long-term as a result of various habitats becoming overgrown and choked with dense vegetation.

Soil loss would decrease 46 percent from 4.1 to 2.2 tons/acre/year. Overall watershed condition would improve. Water quality would meet or exceed state standards. Flood potential would decrease because of improved watershed cover. Springs that feed the Oakley City water supply would be protected.

As a result of improved wildlife conditions, hunting would increase 42 percent over the present use level. More visual diversity and contrast would result. Livestock trampling and subsequent breakage and displacement of artifacts would decrease by 100 percent. A 46 percent decrease in soil erosion would result in significantly less artifact displacement on 94 percent of known cultural sites.

Rancher income would decline in both the short and long term. The loss in ranch income would be so acute that 142 out of 147 permittees would have to seek outside employment to subsidize income or sell their ranch. The local economy would experience significant direct and indirect income losses. Economic efficiency as measured in terms of benefit/cost ratio would be the highest of all management options.

Resource Outputs by Alternative

A variety of land uses and resource commodities can be accommodated on or supplied by public lands in the Cassia RMP area. These uses and commodities involve both consumable resource goods and non-consumable resource values. The following table provides a general comparison of these resource uses and outputs by alternative. In comparing the alternatives, it should be understood that the numbers may not be absolute, although the relationships depicted between alternatives are valid.

Summary of Resource Outputs by Alternative

Output	Unit of Measure	Alternative A	Alternative B	Alternative C	Alternative D	Sub Alternative D
<u>Multiple Use Areas</u>						
Limited Use	Acres/%	33,403/7.0	2,560/0.5	8,633/1.8	238,765/50.1	238,765/50.1
Moderate Use	Acres/%	434,571/91.2	461,128/96.8	467,621/98.2	237,489/49.9	237,489/49.9
Intensive Use	Acres/%	8,299/1.8	12,585/2.7	19/0.0	19/0.0	19/0.0
<u>Transfer Areas</u>						
Private Exchange	Acres/%	5,725/1.2	6,004/1.3	5,234/1.1	- - -	- - -
State Exchange	Acres/%	1,124/0.2	2,959/0.6	2,959/0.6	- - -	- - -
Forest Service Transfer	Acres/%	- - -	2,042/0.4	2,042/0.4	- - -	- - -
Other Disposal	Acres/%	26,830/5.6	6,675/1.4	3,469/0.7	560/0.1	560/0.1
<u>Soils/Watershed</u>						
Soil Erosion Rates	Tons/Acre/Year	4.1	5.1	3.8	3.5	2.2
High Erosion Soils Protected	Acres	36,885	0	36,885	36,885	36,885
Critical Floodplains Protected	Acres	0	2,000	2,000	2,000	2,000
			Shirley, Warm, Meadow, and One Mile Creeks	Same as Alternative 8.	Same as Alternative 8.	Same as Alternative 8.
<u>Flood Prone Watershed</u>						
Protected	Acres	4,887	0	4,887	4,887	4,887
		Beaverdam Creek		Beaverdam Creek	Beaverdam Creek	Beaverdam Creek
<u>Domestic Water Supply</u>						
Protected	Acres	0	0	480	480	480
				City of Oakley	City of Oakley	City of Oakley
<u>Vegetation</u>						
Condition						
Excellent	Acres/%	43,299/9	130,137/28	131,686/28	194,019/41	172,458/37
Good	Acres/%	99,735/21	209,739/45	183,168/39	110,344/24	128,124/27
Fair	Acres/%	175,103/37	77,515/16	89,621/19	105,585/22	75,682/16
Poor	Acres/%	151,156/33	51,902/11	64,818/14	59,345/13	93,029/20
Trend						
Up	Acres/%	77,731/16	327,395/70	309,242/66	241,082/51	413,515/88
Static	Acres/%	275,275/59	123,783/26	139,997/30	199,232/43	49,910/11
Down	Acres/%	116,287/25	18,115/4	20,054/4	28,979/6	5,868/1
Cover	Percent	32	33	33	33	34
<u>Woodland Products</u>						
Habitat (100,803 acres)	Acres Open/Cords	60,035/3,056	100,803/5,132	97,803/5,132	22,658/1,153	22,658/1,153
Pinyon Christmas Trees	Bicennial Cut	520	750	520	0	0
<u>Wildlife</u>						
Mule Deer						
Use Level	AUMs	9,918	9,918	13,569	13,569	13,569
Winter Range Protected	Acres/Type	72,776/Crucial	0	72,776/Crucial	154,795/A11 Winter	154,795/A11 Winter
Antelope						
Use Level	AUMs	167	167	721	721	721
Yearlong Range Protected	Acres	78,280	0	0	78,280	78,280
Sage Grouse						
Habitat Protected	Acres/Type	21,642/Crucial	0	21,642/Crucial	279,223/A11	279,223/A11
Key Riparian Areas Protected	Acres	187	0	14	189	189
Isolated Wildlife Tracts	#/Acres	36/3,965	29/2,925	36/3,965	36/3,965	36/3,965
<u>Livestock Grazing</u>						
Use Level						
	AUMs (Initial/Long Term)	58,316/58,316	62,150/85,268	62,150/78,108	44,774/44,774	0/0
	% Change from Six Year Average (Initial/Long Term)	0/0	+6.6/+46.2	+6.6/+33.9	-23.2/-23.2	-100/-100
<u>New Land Treatments</u>						
	Acres	0	117,930	82,176	0	0

Output	Unit of Measure	Alternative A	Alternative B	Alternative C	Alternative D	Sub Alternative D
Recreation						
Visitor Days (RVD) (Year 2000)						
Hunting	RVDs	24,046	17,400	28,380	31,654	34,253
ORV Use	RVDs	41,200	52,000	47,000	35,000	35,000
Other Dispersed	RVDs	262,500	265,000	270,000	265,000	265,000
Off-Road Vehicle Use						
Wheelat Vehicles						
Open	Acres	274,736	415,348	256,639	36,398	36,398
Limited	Acres	201,357	60,925	219,154	414,155	414,155
Closed	Acres	181	0	480	25,720	25,720
Over Snow Vehicles						
Open	Acres	254,144	472,308	342,202	44,753	44,753
Limited	Acres	151,173	3,965	45,197	180,836	180,836
Closed	Acres	72,956	0	48,374	250,764	250,764
Special Distinctions						
Natural Areas	No./Acres	1/27,250	0	0	0	0
ACECs	No./Acres	0	0	0	1/1,628	1/1,628
Special Rec.Management Area	No./Acres	4/45,210	4/47,293	5/56,437	3/56,207	3/56,207
Open Space, Scenic Area	No./Acres	1/40,967	0	0	0	0
Cultural Resources						
Key Areas Protected	Acres	0	0	27,268	27,268	27,268
				West Goose Creek	West Goose Creek	West Goose Creek
Minerals						
Energy						
Open	Acres/%	53,010/11.1	473,640/99.5	134,175/28.2	44,734/9.4	44,734/9.4
Closed	Acres/%	2,055/0.4	-	-	-	-
Seasonal Closure	Acres/%	420,629/88.3	-	337,054/70.8	428,305/99.9	428,305/99.9
No Surface Occupancy	Acres/%	3,099/0.7	2,579/0.5	5,394/1.1	5,424/1.1	5,424/1.1
Leasables						
Open	Acres/%	471,119/98.9	476,254/100.0	474,193/99.6	437,964/92.0	437,964/92.0
Closed	Acres/%	5,154/1.1	19/0.0	2,074/0.4	38,309/8.0	38,309/8.0
Locatables						
Open	Acres/%	471,119/98.9	476,254/100.0	474,193/99.6	437,964/92.0	437,964/92.0
Closed	Acres/%	5,154/1.1	19/0.0	2,074/0.4	38,309/8.0	38,309/8.0
Salables						
Open	Acres/%	434,101/91.1	473,640/99.5	470,011/98.7	432,839/90.9	432,839/90.9
Closed	Acres/%	42,172/8.9	2,579/0.5	6,262/1.3	43,434/9.1	43,434/9.1
Lands						
Area Open to Rights-of-Way	Acres/%	473,630/99.4	474,833/99.7	473,290/99.4	449,125/94.3	449,125/94.3
		Major utility & pipeline R/Ws restricted to corridors on 273,923 acres.		Major R/Ws restricted to existing localities on 40,957 acres.	Same as Alternative C.	Same as Alternative C.
Area Open to Sanitary Landfills	Acres/%	465,403/97.7	466,033/97.8	426,358/89.5	321,392/57.5	321,392/57.5
Fire Management						
Maximum Suppression	Acres	348,093	44,517	173,611	39,762	39,762
Limited Suppression	Acres	123,190	426,756	302,662	437,511	437,511
Prescribed Burning	Acres	282,546	456,283	460,895	350,464	350,464
Economics						
Employment Gain/Loss (Long Term)	Number	+33	+110	+105	0	-144
Net Present Worth	Dollars	27,551,115	26,774,980	30,356,237	35,390,403	32,730,560
Benefit/Cost Ratio	Return per Dollar	3.75	3.58	3.99	4.65	4.93

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CHAPTER 1

INTRODUCTION

PURPOSE AND NEED FOR THE ACTION

This draft environmental impact statement (DEIS) describes five potential options for managing the resources on 476,273 acres of public land in the Snake River Resource Area in the Bureau of Land Management's Burley District. Each of the resource management alternatives described provides a different framework for or philosophy of management of the public lands and resources. Each of the alternatives provides differing choices for addressing internal management concerns and for resolving public issues.

The purpose of a resource management plan (RMP) is to ensure that the public lands will be managed in accordance with the principles of multiple use and sustained yield. To achieve this purpose the planning process must be responsive to major public issues as determined through public participation, consultation, and coordination. The RMP serves as a master plan to guide Bureau management and to tell others how the lands and resources in the planning area will be managed.

In addition to meeting the need for a master land use plan, each of the alternatives serves two other specific purposes. First, each alternative responds to the President's Public Land Sale Initiative (E.O. 12348) by identifying those lands that are no longer needed to meet public land management objectives and might be put to a higher and better use in private ownership. Second, the alternatives satisfy the intent of a 1975 U. S. District Court approved agreement (Case #1983-73) between BLM and the Natural Resources Defense Council, et. al., in which BLM agreed to consider the consequences of various intensities of livestock grazing in its decision making process.

A resource management plan is required by BLM planning regulations 43 CFR 1600, Public Lands and Resources; Planning, Programming and Budgeting, issued under the authority of sections 201 and 202 of the Federal Land Policy and Management Act of 1976 (FLPMA). The draft environmental impact statement is intended to aid Bureau officials in selecting a resource management plan. The

EIS is also intended to satisfy the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act of 1969 (NEPA), 40 CFR Part 1500. The underlying philosophy of the CEQ regulations is to "ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken."

This EIS will be used as a tiered environmental document, one that can be used as a reference for subsequent environmental analyses, thus reducing paperwork. Following approval of a Cassia Resource Management Plan, future activity planning and project implementation will follow the land use objectives and required actions outlined in the RMP. More intensive environmental assessments covering activity plans and local project work will include site specific details as appropriate.

LOCATION OF THE PLANNING AREA

The Cassia RMP area encompasses 1,629,472 acres located in southcentral Idaho. Approximately 97 percent of this acreage is within Cassia County, 2 percent in Oneida County, and less than 1 percent in each of Twin Falls and Power Counties. The area is bordered on the north by the Snake River; on the west by Twin Falls County and the South Hills Division of the Sawtooth National Forest; on the south by the Elko, Nevada BLM District and the Salt Lake, Utah BLM District; and on the east by Power and Oneida Counties and the Sublett Division of the Sawtooth National Forest. Of the 1,629,472 acres, 29 percent is public land administered by BLM, 44 percent is privately owned, 21 percent is administered by the U. S. Forest Service, 5 percent is State land, and 1 percent is administered by other federal agencies such as the U. S. Fish and Wildlife Service and Bureau of Reclamation.

Map 1-1 shows the location of the Cassia RMP area while color status Map 1-2 shows the land ownership pattern.

THE PLANNING PROCESS

The planning process described in BLM planning regulations 43 CFR Part 1600 consists of the following nine steps.

A. IDENTIFICATION OF ISSUES:

By identifying and focusing on the issues, the scope and direction of the plan is established. In this first step BLM, in cooperation with the League of Women Voters of Idaho, asked the public to identify land management issues and resource management opportunities in the planning area. Late in 1980 an initial mailing list of 290 individuals, groups, and organizations concerned with resource management in the Cassia RMP area was expanded to 790. Issue identification meetings were held March 3, 1981, in Malta; March 4, 1981, in Burley; and March 5, 1981, in Oakley, Idaho. A total of 113 people attended these meetings. The day following the Oakley meeting, an issue identification form was sent to everyone on the mailing list who did not attend one of the public meetings. One hundred

twenty-three (123) of these forms were returned. In a letter dated April 2, 1981, everyone on the mailing list was apprised of the issues that had been identified and asked to indicate the ten issues of greatest resource management priority. Two hundred three (203) responses to the April 2 letter were received. In addition to this formal public participation effort, other resource management issues surfaced during informal contacts with representatives of State and local government, interest and user groups, livestock permittees, and other federal agencies. BLM District staff specialists and managers added their management concerns to the public issues. These public issues and agency management concerns were consolidated and are presented on pages 6 through 16 of this chapter.

B. DEVELOPMENT OF PLANNING CRITERIA:

Planning criteria are prepared to guide development of the RMP. Criteria are written standards that guide future steps of the planning process such as collection of inventory data and analysis of the management situation. Planning criteria are used to evaluate the alternatives and to help select the alternative that will serve as the proposed resource management plan. Planning criteria are based on laws, executive orders and regulations, National and State Director guidance, multiple use and sustained yield principles set forth in FLPMA, and the results of public participation. A Draft Cassia Planning Criteria Newsletter was mailed to 800 members of the public on October 7, 1981. BLM received eight comments on these draft criteria. After considering public input, the draft criteria were modified and a final planning criteria newsletter was sent to the public on February 1, 1982.

C. INFORMATION AND DATA COLLECTION:

Public land resources were inventoried to establish a data base upon which to develop a resource management plan. Some inventories were initiated in response to public issues and management concerns. Other data is an extension of long-term studies. The type of studies completed or the type of data or information collected includes Order 3 soils, soil-vegetation, aquatic habitat, mineral resources, pinyon pine, threatened or endangered plants and animals, ranch budgets, visual resources, and cultural resources. Long-term data collection includes such things as precipitation, actual livestock use and utilization, visitor use, and browse utilization on mule deer winter ranges. BLM also utilized Department of Energy research on ferruginous hawks, Idaho Department of Fish and Game data on wildlife numbers and population trends, and University of Idaho livestock carrying capacities for the Point Springs Rangeland Experiment Station.

D. ANALYSIS OF THE MANAGEMENT SITUATION:

In this step BLM sifts through inventory data to define the existing lands and resources situation, assess public demand for the various resources, and predict the ability of these resources to respond to identified public issues and management concerns on a sustained yield basis. The management situation also provides possible options for future resource management. This step of the Cassia effort was completed in September of 1982.

E. FORMULATION OF ALTERNATIVES:

At this step BLM formulates a range of options for managing the public lands and resources in response to public issues and management concerns and in consideration of the information in the analysis of the management situation. Draft alternatives for Cassia were prepared early in 1983. These draft management options were unveiled for public comment on March 2, 1983, when a Draft Cassia Alternatives Newsletter was sent to over 800 individuals and organizations. Alternatives are described in Chapter 2 of this document.

F. ESTIMATION OF EFFECTS:

During this step BLM predicts and documents the effects or consequences of implementing each of the resource management alternatives developed in Step E. This analysis insures that the spirit and intent of NEPA are incorporated into BLM's decision making process. These effects are described in Chapter 4 of this document.

G. SELECTION OF A PREFERRED ALTERNATIVE:

BLM designates a preferred alternative based on an analysis of public input, planning criteria, and estimation of effects. Once the District Manager selects a preferred alternative, a draft plan and draft environmental impact statement is prepared. The draft plan/EIS is forwarded to the State Director for approval and publication. The public is given 90 days to review and comment on the draft plan/EIS. Management objectives and resource allocations for the Preferred Cassia Alternative are described in Chapter 2, while the environmental consequences of this alternative are documented in Chapter 4.

H. SELECTION OF THE RESOURCE MANAGEMENT PLAN:

This is the final step in preparing the resource management plan. This begins with a review and evaluation of public comment received on the draft RMP/EIS. After review of public input and consideration of the planning criteria, a proposed resource management plan is selected by the District Manager and sent to the BLM Idaho State Director for review. If the State Director concurs with the proposed resource management plan he will publish a final RMP/EIS. At the same time the proposed plan and final EIS are submitted to EPA for filing, a copy will be sent to the Governor for review to determine if the proposed plan is consistent with State, or local plans or programs. The Governor has 60 days in which to identify concerns and provide recommendations in writing to the State Director. The proposed resource management plan may be approved by the State Director after the Governor has responded in writing, but no earlier than 30 days (NEPA requirement) after a notice of the filing of the plan and accompanying final EIS is published in the Federal Register. The District Manager will document the State Director's reason for approving the plan in a Record of Decision that will be distributed to all who have participated, or are interested in the planning process.

I. MONITORING AND EVALUATION:

Once the plan is approved, BLM will begin implementation subject to funding capabilities. The effects of implementation will be monitored to determine the degree of progress that is being made toward achieving the management objectives, to assure the required actions are satisfactory, and that critical resource thresholds are not being exceeded. The results of monitoring will be documented in a report that will be available for public review. The District Manager will evaluate the results of monitoring to determine if the plan requires revision or amendment. Proposed resource elements to be monitored and monitoring techniques are outlined in Appendix C.

ISSUES, MANAGEMENT CONCERNS, AND PLANNING CRITERIA

The Cassia Resource Management Plan addresses public issues and management concerns related to public land management in the planning area. An initial list of 132 issues was developed from comments solicited at public meetings, via newsletters and newspaper ads, and from a variety of informal public contacts. From this initial list of issues, like items were combined and agency management concerns were incorporated to avoid duplication. The result is 20 planning questions that the Cassia RMP must address and respond to. These 20 questions have been used to establish the scope of this environmental impact statement.

It is important to understand that issues brought to BLM's attention by the public involve value judgments or subjective preferences. This frequently results in differing or polarized views of public land management. These alternative management perspectives, as reflected in the four alternatives and one subalternative, are described and analyzed later in this document.

Some of the issues identified by the public were not considered in the RMP. These are issues that do not require a land use appropriation or land use decision. These non-land use issues may be handled through routine administrative channels. An example of a non-land use issue that was brought to BLM's attention and will not be included in the scope of this EIS is that "trespass land uses should be identified." Resolution of this issue involves an administrative decision, adequate funding, and commitment of manpower.

All public input relative to the Cassia RMP has been documented and filed in three-ring binders which are available for examination at the Bureau's Burley District Office, Snake River Resource Area.

While issues are the driving force behind the planning process, indicating the topics that must be addressed and the kinds of land use decisions that must be made, planning criteria indicate the factors or data that BLM must consider prior to arriving at a land use decision relative to any issue.

In Idaho, BLM Districts must consider the following statewide planning criteria in arriving at a decision.

- A. Social and economic values;
- B. Plans, programs, and policies of other federal agencies, state and local governments, and Indian tribes;

- C. Existing law, regulations, and BLM policy;
- D. Future needs and demand for existing or potential resource commodities and values;
- E. Public input;
- F. Public welfare and safety;
- G. Past and present use of public and adjacent lands;
- H. Public benefits of providing goods and services in relation to the costs;
- I. Quantity and quality of non-commodity resource values; and
- J. Environmental impacts.

In addition to these general statewide criteria, the Burley District developed specific planning criteria that must be taken into account in arriving at a land use decision for each of the 20 Cassia planning issues. Not all planning criteria will be met in each management alternative. The preferred alternative best meets all the criteria.

The 20 planning questions that represent public issues and management concerns along with their specific planning criteria are summarized below by resource program. A complete set of planning criteria are available for review in the Snake River Resource Area Office.

RANGE

Planning Question What is the role of the public lands in providing forage for competing uses such as livestock and wildlife?

- Criteria
- Baseline data consisting of an Order 3 Soil Survey, mapped vegetation and ecologic range sites, and the ecologic condition and apparent trend of each grazing allotment will be compared to the total grazing preference for livestock, the past six year average livestock use for the allotment, and the required forage demand for wildlife. This information, along with additional range studies (actual use, utilization, trend, precipitation, and temperature) and consultation with livestock permittees and other interested parties will be used to develop a proposed initial stocking level designed to improve each allotment to good condition or better.
 - Where the existing demand for forage exceeds the current forage production, the following priorities will be followed in assigning the forage resource:
 - protect habitats of threatened and endangered species,
 - provide for wildlife needs such as:
 - wintering areas
 - nesting and brood-rearing areas
 - strutting grounds
 - fawning areas
 - riparian zones

- provide for the past six year average actual livestock use for each allotment,
- provide forage to satisfy the current grazing preference for each permittee,
- in all cases at least 50 percent of the total vegetation production will be designated for non-consumptive uses such as watershed and soil protection, and aesthetics.
- Identify areas in need of Allotment Management Plans.

Planning Question What areas have the potential to produce additional livestock forage?

Criteria - Rangeland inventory information and long-term studies will be used to identify those areas having the potential for development of additional livestock forage. Other inventories will identify crucial resource values such as erosive soils, cultural sites, crucial wildlife habitat, high quality scenery, etc. Land treatment will be allowed if it does not conflict with important non-livestock resource values.

Planning Question How will fire be used as a vegetation management tool?

Criteria - The preceding criteria will also be used to determine areas where fire can be used as a livestock forage management tool.

 - Areas will be identified where prescribed burning can be used to improve or maintain the existing land cover. These areas will be determined from those management opportunities identified through the range, wildlife, and watershed inventories.

 - As a management tool, fire will be utilized in the following two circumstances. Fire will be utilized by the agency as a developed management prescription, or limited suppression will be taken after natural ignition has occurred.

Planning Question How should grazing allotments be grouped according to their management potential?

Criteria - Allotments will be grouped into categories based on similar characteristics, resource needs, and potential for improvement for the purpose of achieving cost efficient betterment of rangeland productivity.

- Grazing allotments will be grouped according to one of the following resource management categories:

Category M: Allotments where the principle objective is to maintain or improve the existing situation.

Category I: Allotments where the principle objective is to improve existing resource conditions.

Category C: Allotments where the principal short-term objective is to prevent deterioration of current resource conditions by managing land in a custodial manner.

- The following proposed criteria is to be used for determining which allotment will be placed in what category:

A. Category M Allotment. Allotments which exhibit the following criteria will be grouped into Category M.

1. Land use plan indicates public lands within the allotment will be retained in public ownership and managed for multiple use purposes.
2. All key areas within the allotment are in good or better range condition. Range trend is static or upward.
3. Livestock grazing is the primary use within the allotment and there are no or very limited land use or resource conflicts such as:
 - a. Areas of intensive mineral production that conflict with livestock grazing;
 - b. Critical watershed areas furnishing water to communities, for human consumption;
 - c. Critical wildlife areas for nesting, rearing of young, wintering, or habitat for threatened or endangered species; or
 - d. Areas of intensive recreation use that conflict with livestock grazing.
4. The allotment is presently under an adequate grazing system which will insure that the existing range condition will be maintained or improved.
5. The allotment is producing sufficient forage to satisfy total grazing preference (including suspended non-use); or present forage production for the allotment is at or near potential. No opportunity exists to increase forage production.
6. The current permittee has demonstrated the ability and desire to manage the allotment in such a manner as to improve range condition and benefit all resources within the allotment which are dependent on the vegetation resource.

B. Category I Allotments. Allotments exhibiting the following criteria will be grouped in Category I.

1. Land use plan indicates that public lands within the allotment will be retained in public ownership and managed for multiple use purposes.
2. More than 20 percent of the allotment is in fair or worse range condition or all key areas within the allotment are in fair or poor condition. Range trend is static or downward.
3. Livestock grazing may be the primary use of the allotment; however, other resource values and uses exist that may present existing or potential resource conflicts requiring special management attention.
4. Present management will not provide good or better range condition.
5. The allotment has moderate to high potential for increased vegetation production through management or development and the opportunity exists for a positive economic return on the public investment.

C. Category C Allotments. Allotments exhibiting the following criteria will be grouped in Category C.

1. Land use plan indicates that public lands within the allotment may be subject to disposal within a short (5 to 10 years) time frame. Disposal may be for community expansion, agricultural development, or other purposes as spelled out in the land use plan.
2. The ratio of public lands to private or other lands within the allotment is so small (less than 20 percent) as to make up an insignificant amount of the total, and present management of the allotment will maintain the public lands in good ecological condition.
3. The allotment is in good condition and no resource or other land use conflicts exist. Present management of the allotment will stabilize the range in good condition.
4. The allotment lacks the potential for increased vegetation production through management or development or the cost of such development would be so excessive as to prevent a positive economic return on the public investment.

WOODLAND PRODUCTS

Planning Question How will the woodland resource be managed to provide for the increasing public demand for firewood, posts, and Christmas trees?

- Criteria
- Integrate harvesting of firewood with other resource development plans such as rangeland chainings and prescribed burns. Grant the public "free-use" for removal of wood in these areas.
 - Focus the removal of woodland products on designated areas to assure best management of this and other resources. Incorporate the objective of protecting non-woodland resources (soils, wildlife, visual quality, etc.) in all woodland product harvest plans.
 - Provide a sustained, even flow of products to meet local demand within the productive potential of the woodland resource.

WILDLIFE AND FISHERIES

Planning Question How will riparian and wetland areas be managed?

- Criteria
- Retain riparian areas in public ownership unless the transfer of these areas is mandated by legislation or Presidential Order.
 - Streams and wetlands will be managed to restore, protect, and enhance the quality and quantity of aquatic habitat on public lands. Protective measures will occur on a priority basis as funding permits. The following criteria will be used to prioritize the order of protection of wetland/riparian areas:
 - areas providing habitat for threatened, endangered, or sensitive species;
 - areas that contain crucial or key wildlife habitat;
 - waters presently having productive fisheries;
 - waters essential for the maintenance of water quality;
 - areas that could potentially become crucial wildlife habitat as a result of the reintroduction of wildlife species; and
 - waters that have potential as a productive fishery.
 - Rangeland management grazing systems will be implemented to protect or improve riparian/wetland areas. Buffer pastures may be set up to accommodate livestock grazing and lessen the impact of cattle use

along streams or wetland areas where inventory data indicates forage in excess of an operator's grazing preference.

Planning Question How will the habitat of threatened, endangered, or sensitive wildlife and plant species be managed?

- Criteria
- Identify all known threatened, endangered, or sensitive plant and animal habitat.
 - Take necessary measures to eliminate conflict or land uses that will jeopardize threatened, endangered, or sensitive species.

Planning Question How will big game, upland game, waterfowl, and non-game habitat be managed?

- Criteria
- Classify public lands as to their value in providing crucial wildlife habitat. Priority areas include:
 - wintering areas;
 - nesting and brood-rearing areas;
 - fawning areas;
 - strutting grounds; and
 - riparian habitat.
 - Where conflicts between wildlife and other land uses occur, conflicts will be resolved in favor of wildlife in accordance with the preceding priorities.
 - Designate forage to provide for the food requirements of present big game herds as well as meet the 1995 population management goals established by the Idaho Department of Fish and Game.
 - Identify areas of conflict between wildlife and other land uses. Evaluate appropriate protective measures such as road closures and temporary or seasonal restrictions on other uses to eliminate conflicts.
 - Identify areas in need of Habitat Management Plans.

WATERSHED

Planning Question What are the land management objectives for critical floodplains?

- Criteria
- Floodplains will be identified from field studies and U. S. Geological Survey maps. Streams that contribute to flooding problems will be identified by contacting city and county officials, highway departments and canal companies.
 - Disposal, occupancy, and modification of floodplains will be avoided where these actions result in short or long-term adverse impacts.

- Natural and beneficial functions of floodplains will be maintained or restored by achieving good or excellent ecologic condition. The management target will include grass and forb diversity and the presence of brushy species which will achieve stream bank stability.

Planning Question How will soil and water resources be managed?

Criteria

- BLM management actions will provide for water quality that meets or exceeds State of Idaho Standards and Quality Criteria for Water. BLM will implement Best Management Practices to control non-point pollution sources from dispersed land uses such as livestock grazing.
- Current accelerated erosion problems will be located using data gathered from BLM rangeland and watershed studies and from information obtained from the Soil Conservation Service.
- Identified erosion problems will be controlled by appropriate actions such as use restrictions, seasonal closures, and rangeland watershed seedings.
- An Order 3 Soil Survey will be used to identify those soils having restrictions for land uses such as livestock grazing, road building, off-road vehicle use, vegetative conversions, etc.

CULTURAL AND HISTORAL RESOURCES

Planning Question How will cultural and historical resources be managed?

Criteria

- Locate cultural and historical resources by conducting appropriate literature searches and on-the-ground inventories.
- Cultural resource sites will be afforded protection relative to their significance. Priority will be given to sites on or eligible for the National
- Register of Historic Places. Avoidance of a site by surface disturbing activities may be construed as sufficient protection.
- Highly significant cultural or historic resource sites may require designation as special management areas and require preparation of cultural resource activity plans to fully protect or enhance them.

RECREATION

Planning Question How will BLM provide for off road vehicle use?

- Criteria
- Identify areas of public land that are suitable for designation as open, limited, or closed to off-road vehicles.
 - Designations for ORV use will consider protection of resource values such as crucial wildlife habitat, riparian or floodplain areas, cultural or historical sites, watershed stability, visual quality, and other recreational values and uses.
 - Areas presently experiencing ORV/non-ORV conflict will receive top priority for reconciliation through the planning process.
 - As a public service, BLM ORV designations will be compatible with those of other agencies, when possible, in order to improve public understanding of ORV designations through uniform administration.

Planning Question Where will BLM provide for developed and dispersed recreation?

- Criteria
- Identify opportunities for undeveloped and primitive recreation such as hiking trails, rockhounding areas, etc.
 - Emphasis will be given to undeveloped or dispersed recreation activities in preference to those that are more dependent upon facilities.
 - Priority will be given to meeting the recreation needs of the local population. Secondary priority will be given to meeting demands on the state and then the national level.
 - Recreation opportunities will not be provided where demand is currently being met by existing programs of other Federal, state, local, or private agencies or individuals.
 - Limit developed recreation to those areas which can sustain use without environmental damage.
 - Identify areas suitable for developed recreation use such as campsites, picnic areas, etc.
 - Designate Special Recreation Management Areas where significant recreation opportunity exists and more detailed recreation activity planning is needed.

Planning Question How will areas of high quality scenery, roadless character, and unique historical, physical, or biological values be managed?

- Criteria
- Follow visual resource management class guidelines when planning multiple use activities on the public lands. These guidelines provide suggestions on acceptable changes in the basic landscape elements of form, line, color, and texture for any management activity in any of the five visual classes.
 - Identify special management areas for the maintenance or protection of high quality scenic values.
 - Identify, via recreation and other resource inventories, those public land areas with special recreation qualities stemming from unique or scarce visual, cultural/historical, roadless, or physical and biological characteristics.
 - Designate special management areas or areas of critical environmental concern to protect and prevent irreparable damage to important cultural or scenic values, physical or biologic resources, or to protect life and provide safety from natural hazards. Protect and preserve all segments of the Oregon National Historic Trail.

LANDS AND REALTY

Planning Question What lands could be disposed of or exchanged to best serve the public interest or improve public land management?

- Criteria
- Maintain public lands in federal ownership unless it is determined that disposing of a particular parcel will better serve the public interest.
 - Identify public lands that could be acquired from or transferred to other agencies for the following purposes:
 - improved service to the public;
 - improved administrative efficiency;
 - consolidation within political jurisdictions;
 - consolidation within watersheds; and
 - protect existing land uses provided they remain in the public interest.
 - Public land tracts suitable for community expansion, recreational needs, and other public purposes will be identified.

- Dispose of public lands through sale when it is determined that a tract is difficult and uneconomical to manage, the tract is no longer required for any specific federal purpose, and disposal would serve important public objectives.
- Public land tracts may be leased or conveyed for recreational and public purposes under specified conditions.
- Lands having only Class I, II, and possibly III soils as determined by the Soil Conservation Service will be considered for agricultural development.
- Public lands within critical groundwater areas are not available for desert land entry.

Planning Question What lands are available for rights-of-way to accomodate energy, utility, and other public service needs?

- Criteria
- Whenever possible, corridors will be favored over separate rights-of-ways.
 - Rights-of-way will generally be provided, except when the following situations prevail:
 - where soils have high erosion susceptibility;
 - around intensively developed recreation sites;
 - in crucial wildlife habitat; and
 - where they would be adverse to national defense.

Planning Question What areas are available for sanitary landfills?

- Criteria
- Suitable areas within close proximity to population centers will be identified. To be suitable a proposed landfill site should not have any adverse effect on:
 - local property values;
 - fire and other safety conditions;
 - aesthetic values; and
 - other values through acceleration of soil erosion and sedimentation.
 - Landfill operations will have to meet local and state zoning, health, and safety standards.

MINERALS

Planning Question How will energy resource development be accommodated?

- Criteria
- Identify areas of potential oil and gas and geothermal development based on knowledge of geologic structure and industry interest.

- Priority areas for leasing will be in known geologic structures and areas adjacent to them.
- Evaluate other resource values and uses before energy leasing and the exploration and development associated with such leasing occurs.
- Identify areas where energy leasing conflicts with other resources, but where development can still occur after special studies or with certain protective measures such as seasonal closures.
- Require reclamation to meet State of Idaho and federal regulations.

Planning Question What areas will be open to the removal of sand and gravel?

- Criteria
- Priority will be given to meeting the sand and gravel needs of local highway districts, county road departments, the State Department of Transportation, and other federal agencies.
 - Designate sand and gravel sale areas only when the benefits to be accrued from use of the materials exceed aggregate damages to other public land resources located on the sale area. Exclude sand and gravel development from crucial wildlife habitat, riparian areas, floodplains, prime farmland, cultural or historical sites, and areas susceptible to soil erosion.

Planning Question How will development of the building stone resource be accommodated?

- Criteria
- Identify areas that have potential value for location of mining claims for building stone.
 - Identify areas that are suitable for the sale of building stone to meet the public demand for this product. In general, the following areas are considered unsuitable as sale areas: crucial wildlife habitat, riparian areas, cultural and historical areas, prime farmland, and threatened and endangered plant or animal habitat.

CHAPTER 2

ALTERNATIVES INCLUDING THE PREFERRED RESOURCE MANAGEMENT PLAN

This chapter is the focal point of the Environmental Impact Statement. It consists of four parts: (1) a description of the statewide planning system, including resource management guidelines and multiple use and transfer areas, that provides the basis for developing the RMP; (2) a description of the management areas that form the basic structure for all alternatives; (3) a description of the four alternatives considered in detail including a summary of projected impacts; and (4) a monitoring plan designed to evaluate the progress and results of implementing the plan.

STATEWIDE PLANNING SYSTEM

Bureau planning regulations are implemented in Idaho through a statewide planning system. This system provides for the use of uniform policies and procedures for planning and establishes standard provisions, land use designations, and other RMP components to be incorporated in Idaho RMPs, amendments, and revisions. Among the elements of the statewide planning system are resource management guidelines and multiple use and transfer areas.

STATEWIDE RESOURCE MANAGEMENT GUIDELINES. The following guidelines direct BLM management actions on public lands in Idaho. These guidelines are applicable to all alternatives, providing management direction and minimum standards for managing the resources found on the public lands. These guidelines have been divided into two groups, those dealing primarily with procedures and policy and those dealing with the management of specific resources. The following list is a summary of the statewide guidelines. Statewide Resource Management Guidelines will be printed in full in the final RMP.

PROCEDURES/POLICY GUIDELINES

Allowable Uses. The public lands will be managed under the principles of multiple use and sustained yield. Any valid use, occupancy, and development

of the public lands will be considered, subject to applicable environmental review procedures, unless specifically excluded in the plan.

Areas of Critical Environmental Concern. Areas of critical environmental concern will be established through the planning process. These are areas where special management is required to protect and prevent irreparable damage to important resource values or to provide safety measures in areas of natural hazards.

Coordination With Other Agencies, State and Local Governments, and Indian Tribes. BLM will coordinate its review of detailed management plans and individual plans and projects prepared in conjunction with the RMP to ensure consistency with officially adopted and approved plans, policies, and programs of other agencies, state and local governments, and Indian tribes.

Detailed Management Plans. Detailed management plans (activity plans) will be prepared for areas where greater detail than that provided in the RMP is needed. Activity plans indicate specific management practices, improvements, allocations, and other information for a specific site or area.

Environmental Reviews. An environmental analysis will be undertaken prior to approval of any project involving public land.

Land Tenure Adjustment. Public lands will be retained in federal ownership with the exception of lands specifically identified in the plan as transfer areas. Final transfer is subject to detailed analysis and such documentation as prescribed by law. Lands may be acquired by BLM as authorized by law.

RESOURCE GUIDELINES

Air Quality. BLM will manage all public lands as Class II unless they are reclassified by the state as a result of the procedures prescribed in the Clean Air Act, as amended.

Cultural Resources. BLM will manage cultural resources consistent with state and federal laws.

Economic and Social Considerations. Any management action undertaken in connection with the RMP will be cost-effective and take into account local social and economic factors.

Fire Management. Fire will be used as a resource management tool to protect and enhance the resources of the public lands. Wildfires on public lands will be met with maximum suppression action unless limited suppression is identified for the specific area. Prescribed burning may be used as a management tool if identified in the plan.

Fish and Wildlife. Public lands will be managed to maintain or improve wildlife habitat. Priority will be given to threatened or endangered species habitat. All actions will comply with federal and state laws concerning fish and wildlife.

Forest Management. Public lands containing commercial timber or minor forest products are open for harvest unless specifically closed or restricted by law, regulation, or to protect other resources via the plan.

Geology, Energy, Minerals. Public lands will be available for energy and mineral leasing, sale, exploration, and development, subject to applicable regulations and federal and state law, environmental analysis, and appropriate stipulations to protect other resources. Public lands are available for location of mining claims subject to the mining laws unless withdrawn from mineral entry. Significant scientific, recreational, and educational values associated with geological resources will be maintained or enhanced.

Motorized Vehicle Access and Use. All public lands will be placed in one of three categories via the plan for purposes of controlling motorized vehicle access and use: open, limited, or closed.

Public Utilities. Public lands may be considered for the installation of public utilities, except where expressly closed by law, regulation, or to protect other resources via the plan, subject to environmental analysis.

Rangeland Management. Forage use will be assigned on an allotment basis to livestock and wildlife with sufficient vegetation reserved for purposes of maintaining plant vigor, stabilizing soil, providing cover for wildlife, and other nonconsumptive uses. Maintenance or improvement of forage production levels, range condition, and range trend will be accomplished by implementing grazing systems, developing range improvements, and implementing other range management practices as appropriate.

Recreation. Opportunities for dispersed and resource dependent types of outdoor recreation will be provided commensurate with demand and the need to provide resource protection. Recreation facilities will be provided to meet existing and projected demand.

Transportation. Bureau roads are for use, development, protection, and administration of public lands and resources. Although public use is generally allowed, roads may be closed or use restricted to fulfill management objectives, protect public health and safety, or preserve resources. Easements required to provide access to public lands will be acquired when a substantial public need is documented or the access is needed to achieve resource management objectives or best management practices.

Visual Resource Management. Consideration of scenic values will be included in the analysis of all activities involving alteration of the natural character of the landscape. The degree of alteration allowed is determined through an inventory process which results in the classification of all public lands into one of five Visual Resource Management classes, each class allowing for a different degree of modification.

Watershed. A variety of methods, including structural, may be employed to maintain, improve, protect, and restore watershed conditions and to provide for various water improvements. Meeting emergency needs will be the first priority. The BLM will comply with all State of Idaho water laws and will work with local, state, and federal agencies in designing and locating such projects.

MULTIPLE USE AND TRANSFER AREAS. Under the statewide planning system, RMPs must incorporate multiple use and transfer area designations. Multiple use and transfer areas are used to: clearly distinguish retention and transfer areas; help ensure consistency and uniformity in Idaho RMPs; and indicate the level of resource protection, management, use, and development provided for on the public lands.

A multiple use or transfer area designation is established through the planning process for an area having certain physical, biological, or cultural resource characteristics. Individual multiple use and transfer areas may involve several resource values. The decision to assign a particular multiple use or transfer area designation is made on the basis of the overall level of management, intensity of use, and degree of resource protection required. Multiple use and transfer area designations may involve trade-offs and are not based on any prescribed formula. Multiple use and transfer area decisions are further refined by the development of specific resource management objectives and determination of the actions required to accomplish those objectives.

General Provisions for Multiple Use and Transfer Areas. General provisions provide statewide consistency in multiple use and transfer area designations. They are:

Limited Use Areas. Limited use areas are designated to protect sensitive and crucial wildlife habitat, scenic values, cultural resources, watershed, and other resources, and where legal and policy constraints necessitate stringent environmental control.

Because these areas involve relatively greater environmental constraints than other areas of public lands, special attention will be given to finding appropriate locations for potentially conflicting uses. Generally, lower intensities of use are required under carefully controlled conditions to protect and preserve the values found in these areas. Public lands in a limited use area will be retained in federal ownership unless specifically identified for transfer.

Moderate Use Areas. Moderate use areas are generally suitable for a wide range of existing and potential uses and will be managed for production and use of their forage, timber, minerals and energy, recreation, or other values. Where conflicts occur with other resources or uses, full consideration of all benefits and costs will be taken into account in resolving such conflicts. Sensitive and significant values will always be protected consistent with federal and state law. Public lands in a moderate use area will be retained in federal ownership unless specifically identified for transfer.

Intensive Use Areas. Intensive use areas are established to reflect existing demand or to meet projected needs for a major or large scale intensive use such as a major campground, ORV area, mine, or public utility installation. Protection of sensitive and significant resources, however, will be ensured consistent with federal and state law. Public lands in intensive use areas will be retained in federal ownership unless specifically identified for transfer.

Transfer Areas. Transfer areas are the only areas which may be transferred out of federal ownership under this plan. Public lands declared eligible for transfer by inclusion in this category are subject to detailed consideration

prior to the final decision regarding transfer. Transfer areas are delineated in response to specific demands and needs identified during the planning process, such as agricultural development, community expansion, and other transfers, including transfer to the State of Idaho. Transfer areas will be managed on a custodial basis until transferred from federal jurisdiction. New public investments in these lands will generally be kept to a minimum.

LIVESTOCK MANAGEMENT

Grazing Management Systems. Livestock are very selective both as to plant species and areas grazed. The most palatable plants and the most accessible areas are grazed first and heaviest. Grazing systems are utilized in regulating livestock use to improve the quality and quantity of desired vegetation, to alleviate a particular problem, or to enhance multiple use values. Appendix B shows the allotments scheduled for grazing systems. The proposal for the EIS area involves four primary grazing systems: rest rotation, deferred rotation, deferred use, and seasonal use.

Rest-Rotation. Rest-rotation grazing systematically provides a period (or "treatment") of rest for at least one continuous growing season for each pasture included in the allotment. Normally the number of pastures is equal to the number of separate treatments employed in the particular grazing systems. Each treatment consists of a scheduled, but different, period of grazing during the grazing year. These treatments are "rotated" annually from one pasture to another to vary the periods of rest and thereby provide for the physiological needs of the vegetation.

Rest-rotation systems are generally considered desirable in area where periodic growing seasons of rest are required to restore range condition and plant vigor. They are also considered beneficial in improving forage production and vegetation composition within a relatively short period of time (five to ten years).

Deferred Rotation. Deferred rotation grazing consists of two or more treatments, at least one of which systematically provides rest from grazing during the critical growing period for each pasture included in the allotment. It is distinguished from rest-rotation by absence of a yearlong period of complete rest. However, as under a rest-rotation system, the treatments are rotated each year from one pasture to another.

Deferred rotation systems are suited for allotments where resource management objectives could be satisfied without yearlong rest periods and where most of the range is in fair or good condition or in the static or upward trend class.

Deferred Grazing. A deferred grazing system is designed to delay grazing on a portion of an allotment each year until a specified date or occurrence. If grazing can be deferred every few years, then forage plants have a better opportunity to reproduce. Grazing after seed maturity injures plants less and is believed to be beneficial, since animals scatter and trample the seeds into the soil, promoting seedling establishment. By allowing important forage plants to grow unhindered during the period most favorable for their growth, they are enabled to produce a greater quantity of seed. Nearly equal advantages result from deferring grazing on plants that reproduce vegetatively.

Seasonal Use Areas. Seasonal grazing is restricted to a specific season. Allotments are not necessarily divided into pastures, but are grazed at a moderate rate during the same period each year.

This system is recommended for those allotments where maintenance of range conditions is desired; where past and current livestock use has been on a seasonal basis and range is producing at a satisfactory level; or where the area is too small or composed of several isolated parcels that cannot be effectively managed under some type of intensive system.

Land Treatment. The type of land treatment to be applied to an area varies with each area's needs and capabilities. Some areas have an unbalanced composition of species which make them less productive than their potential. Upon careful evaluation of each proposed land treatment area the following methods of treatment should be considered for resource improvement: chemical (spray or use of pellets), mechanical (chain, chain and seed, plow and seed, or rotobeat), burn, or burn and seed. Seeding could be both aerial or by drill. Improvement could result from removal of existing vegetation and reseeding with a mixture of palatable shrubs, forbs, and grasses that will provide for watershed protection as well as meet forage requirements for wildlife and livestock. Other areas may have an adequate existing source of palatable species but they are not producing as they should because of competition from an undesirable species. When this competition is reduced or eliminated the production correspondingly increases.

Chemical treatment would be proposed on areas where an adequate source of palatable species exists but is not producing as it should because of competition from undesirable species or where the area is not suitable for mechanical treatment.

Mechanical treatment would usually be applied to areas that do not have an adequate or balanced vegetation species mix to provide for wildlife, livestock, and watershed needs. Since this method is the most expensive type of land treatment it should be applied to the most productive soils.

Prescribed burning as a treatment would be considered as an alternative to either chemical or mechanical method due to the economics involved. Burning is much less expensive. Burning could be used to remove competition as discussed under chemical treatment or to reduce vegetation volume in preparation for seeding.

MANAGEMENT AREAS

The Cassia RMP area consists of 1,629,472 acres of which 476,273 acres (29 percent) are administered by the BLM. To provide a basis for the management of these public lands, 14 management areas were identified (Map 2-1). These management areas were defined on the basis of three primary factors: geographic continuity, similarity of resource values, and similar management needs. The management areas are the same for each alternative. Where adjustments are required to respond to specific issues and reflect differences between alternatives, management sub areas are established. A description of the 14 management areas follows.

Management Area 1 - MILNER

The 2,055 acre Milner area is located seven miles west of Burley. This lava plain borders the Snake River for approximately four miles and is surrounded on all other sides by agricultural lands. For the 84 river miles from Salmon Falls Creek on the west to Lake Walcott on the east, this is the only large block of public land on the south side of the Snake River. Vegetation is primarily sagebrush-cheatgrass with some brush areas having an understory of native grasses and forbs. A wide variety of wildlife inhabits the area, with pheasant and Hungarian partridge the main upland game species. Waterfowl are found in large numbers along the river. Many non-game birds and birds of prey frequent the area. Forty-five percent of the area is included within a grazing allotment with 100 percent of this area in poor range condition. A visible segment of the Oregon Trail traverses the area. The City of Burley operates a 60 acre trapshooting range and an 80 acre archery range under Recreation and Public Purposes Act leases. The area is popular with pheasant and duck hunters.

Management Area 2 - FOOTHILLS

The Foothills consists of 48,394 acres of public land. This area is located along the north slope of the South Hills, which are administered by the Twin Falls Ranger District, Sawtooth National Forest. Elevations within this area range from 6,500 feet along the Forest Service border to 4,000 feet along the northern edge of the unit. Vegetation is predominantly low sage, big sage, and juniper with wheatgrass seedlings on the lower slopes. There are 7,146 acres of juniper woodland in the unit. Approximately 400 acres have soils with high present erosion. Eleven grazing allotments are located within the area. This area provides important habitat for mule deer and sage grouse, containing 33,136 acres of deer winter range and 28,496 acres of sage grouse habitat with 2,886 acres of winter habitat and 2,837 acres of strutting/brood-rearing habitat. Several springs and 18 miles of streams provide 44 acres of wetland/riparian habitat important for song birds, small mammals, game birds, and deer.

Management Area 3 - WEST GOOSE CREEK

The West Goose Creek area includes 27,268 acres of public land. The unit consists of all lands from Goose Creek west to the U. S. Forest Service and from the Utah/Nevada border north to Mackey Canyon. Elevations range from 4,400 to 6,000 feet. The unit consists primarily of moderate to steep sloped drainages with the most common vegetation being sagebrush and juniper (16,089 acres of juniper woodlands). Highly erosive volcanic soils are found in the southern half of the area. Approximately 7,085 acres have high present or potential erosion. Beaverdam Creek is fed by a 4,887 acre watershed that is prone to flooding. Approximately 8 miles of streams, along Goose, Trapper, and Beaverdam Creeks, and a number of springs provide 20 acres of wetland/riparian habitat. Eleven grazing allotments are included in the area. Included in the area are 10,321 acres of deer winter range and 20,021 acres of sage grouse habitat. The highest density of cultural resource sites in Cassia County is found here. In addition, the area provides a major source of runoff for Goose Creek Reservoir, a primary source of irrigation water in the Oakley area. Active mining for Desert Antique stone is occurring on 400 acres between Trapper Creek and Little Cottonwood Creek.

Management Area 4 - MIDDLE MOUNTAIN

Totaling 40,608 acres, this unit consists of Middle Mountain and surrounding lands on the east side of the Goose Creek drainage. Elevations range from 4,600 feet on the north to 7,900 feet on the south end of the area. Vegetation transitions closely follow the changes in elevation with wheatgrass seedlings in the lowlands on the north, juniper on the hills and plateaus above Goose Creek, and mountain brush and aspen on the higher slopes. Some 18,702 acres of juniper woodlands are found in the area. Fleabane, a proposed federal endangered plant species, is located in the northern most portion of the area. There are approximately 12,796 acres of soils that presently have high erosion or have potential for high erosion. Sixteen miles of streams and numerous springs provide 41 acres of wetland/riparian habitat that is rich in wildlife variety and abundance. There are 32,476 acres of sage grouse habitat with 1,704 acres of winter habitat and 1,027 acres of nesting/brood-rearing habitat in the area. The area provides 15,041 acres of deer winter range. Several springs in an area approximately 480 acres in size in the north central portion of the area have been developed by the City of Oakley as a domestic water supply. The area contains significant deposits of a quartzite, commonly known as Oakley stone, which is the center of a substantial building stone mining industry. The mining industry is principally concentrated in the central portion of the management area. The area contains fourteen livestock grazing allotments.

Management Area 5 - ADMINISTRATIVE SITE

This area consists of 19 acres of public land in T. 10 S., R. 23 E., Section 32. The area is currently being developed as the new administrative site for the Burley District BLM. Current facilities located on the site consist of two metal buildings containing warehouse, motorpool, fire management, and operations offices. The radio shop occupies a trailer house located on the site. A material storage area has been fenced and a motorpool parking area is in use. All portions of the site have, until recently, been utilized for the production of alfalfa.

Management Area 6 - EAST HILLS

This area south and east of Declo consists of 3,711 acres of public land. The terrain ranges from gently rolling to steep hills. Vegetation communities include perennial grass, big sagebrush, and juniper (1,160 acres of juniper woodland). Approximately one-fourth of the area was recently burned by a range fire. Water in this area is sparse, with only two springs and no perennial streams. The area includes five grazing allotments. Hungarian partridge are the only upland game species that provide recreation. Mule deer winter range totals 2,708 acres. The area is popular with motorcyclists although legal access to the public lands has been a problem.

Management Area 7 - ALBION

This management area consists of 21,300 acres scattered among 30 livestock grazing allotments along the west, north, and east sides of the Albion Mountain Range. The area is high foothill country with an elevation range

of 5,200 to 6,600 feet. Vegetation is predominantly big and low sagebrush on the east and west side of the unit with some fir, aspen, and mountain brush in the northern portion of the area. Woodland habitat, primarily juniper, occurs on 1,626 acres. Approximately four miles of streams and a number of springs provide nine acres of wetland/riparian habitat valuable to a variety of wildlife. Those areas of public land interspersed among dryland wheat farms provide quality habitat for Hungarian partridge. Sage grouse habitat is found on 15,629 acres of the area with 954 acres of winter habitat and 222 acres of brood-rearing habitat. Deer winter range totals approximately 3,816 acres. Public land in this area provides crucial habitat for unimpeded deer migration from higher summer range on the National Forest onto lower winter habitat on public lands in surrounding management areas. Portions of this management area are popular with upland game hunters who seek Hungarian partridge and sage grouse.

Management Area 8 - CITY OF ROCKS

Totaling 17,877 acres, this unit consists of the City of Rocks and the surrounding mountains at the southern end of the Albion Range. Elevation ranges from 5,280 feet along the eastern edge of the unit to over 7,700 feet on its highest peak. The area is unique in that it contains the largest concentration of pinyon pine in Idaho. A limited amount of non-commercial Christmas tree cutting is presently allowed (520 trees biennially). Other vegetation types in the area include juniper, big sagebrush, and wheatgrass seedings. Mixed pinyon/juniper woodlands occur on 11,437 acres in the unit. Nearly 2,512 acres have soils with high present erosion. Approximately 1.3 miles of streams and a number of springs provide five acres of wetland/riparian habitat. Some 11,818 acres of sage grouse habitat occur in the area. An important deer migration route crosses the western portion of the unit, with 9,277 acres identified as deer winter range. The area contains significant historic, geologic, and scenic values. A central core area is currently listed on the National Register of Historic Places, is designated as a National Historic Landmark and a National Natural Landmark, and is being considered for designation as a National Monument. The area contains unique geologic landforms, as well as remnants of two historic trails - the California Trail and the Salt Lake Cut-off. Scenic values are the highest in the RMP area. Soil erosion is a problem on approximately 13 percent of the area. Considerable recreational use occurs in the area including rock climbing, sightseeing, hiking, and hunting. A picnic area is located at Twin Sisters. There are fourteen grazing allotments in the area.

Management Area 9 - RAFT RIVER VALLEY

The Raft River Valley area consists of 106,684 acres of public land. This area includes the Raft River Valley and foothills of the Raft River and Black Pine Mountains. It extends from the Utah border to the Idaho area north of Malta. Elevation ranges from 5,500 feet in the foothills along the Utah border to 4,520 feet at the north end of the unit. Vegetation in the area consists primarily of sagebrush, greasewood, and shadscale/salt-bush types with considerable acreage in wheatgrass seedings. Some 1,144 acres contain woodland habitat. High erosion potential soils occur on 6,855 acres. Seventeen acres of wetland/riparian habitat occur along 7.5 miles of Warm Creek and Raft River and around a number of springs. Four tributaries to the Raft River - Warm, Shirley, Meadow, and One Mile Creeks

- have been identified as critical floodplains. Yearlong antelope habitat is found on 36,445 acres in the area. Sage grouse habitat is present on 61,763 acres including 556 acres of brood-rearing habitat. Ferruginous hawks, a sensitive species in Idaho, utilize much of the area as habitat and several nesting sites have been identified. Upland game hunting and ORV use are the main recreational activities in the area. Thirty-one grazing allotments are located in the management area.

The Point Springs Rangeland Research Area is located six miles east of Malta. This area is utilized by universities for rangeland grazing investigations such as forage production and utilization, stand density, and livestock weights and gains.

Management Area 10 - JIM SAGE

The Jim Sage area consists of the Jim Sage Mountains and surrounding foothills encompassing 76,667 acres. The eastern one-third of the area is a broad, gently sloping plain. Elevation ranges from 4,600 feet along the eastern edge of the unit to over 8,000 feet on the highest peak. Vegetation is dominated by sagebrush types with significant areas of juniper, native grasses, and wheatgrass seedings. Considerable mountain shrub is found on the upper slopes. There are 23,127 acres identified as woodland habitat, primarily juniper with some scattered pinyon. High erosion potential soils occur on 1,560 acres. Numerous springs and 9.5 miles of streams provide 25 acres of wetland/riparian habitat. The central, mountainous portion of the unit provides year round deer range with 36,164 acres being winter range. Antelope yearlong habitat is found on 3,327 acres along the eastern edge of the area. Approximately 5,730 acres of sage grouse winter habitat, 1,201 acres of nesting/brood-rearing habitat, and 58,894 acres of general habitat are found in the unit. Ferruginous hawks, a sensitive species in Idaho, utilize the eastern portion of the unit as habitat with a number of identified nest sites present. The central portion of the Jim Sage Mountains remains primitive in nature and is generally unroaded with few range developments or other improvements. Non-motorized recreational activities, such as hiking and horseback riding, are predominant in this portion of the unit with motorized pursuits confined to the lower slopes and foothills. Hunting occurs throughout the unit. Five grazing allotments are included in the area.

Management Area 11 - COTTEREL MOUNTAIN

This area consists of 40,967 acres of public land. Cotterel Mountain is an upthrust fault block that drops off steeply on all sides. The ridge top offers scenic views of the Raft River Valley, the Snake River Plain, and the Sawtooth Mountains. Elevation ranges from 7,125 feet on the ridge to 4,450 feet in the Raft River Valley on the units eastern edge. Juniper stands with openings of sagebrush and native grass cover the ridge top and adjacent side slopes. Inventoried woodland habitat includes some 17,839 acres of juniper. Wheatgrass seedings are found on some of the lower slopes and extend onto the valley floor on the eastern side of the unit. On the higher slopes there are patches of aspen and several large stands of mountain mahogany. High erosion potential soils occur on 5,677 acres. Approximately 26 acres of wetland/riparian habitat are found around a number of springs and along some nine miles of streams. Several communication facilities, including one operated by the Federal Aviation

Administration, are located on the highest peak in the mountain range. There is a small mining operation on the north and a building stone common use area on the southern end of the unit. A variety of wildlife habitats can be found in the area, including 18,607 acres of deer winter range and 4,069 acres of yearlong antelope habitat. Sage grouse habitat covers 17,721 acres, including 703 acres of brood-rearing habitat. Ferruginous hawks utilize the area as habitat with several identified nesting sites on the lower slopes in the southeast portion of the unit. A primitive road extends along the ridge top providing access to the entire mountain. Several feeder roads and trails provide additional access, but the area remains largely unroaded which adds to the open space character of the area. Hunting, sightseeing, ORV use, and winter recreation pursuits are common in the area. Two semi-primitive campgrounds, at Coe Creek and McClendon Spring, have been developed. Three grazing allotments are found in the area.

Management Area 12 - HIGHWAY UNIT

The Highway Unit consists of 45,894 acres of public land. The area consists of a basaltic plain south of Lake Walcott. Elevation ranges from 4,400 feet along the southern edge of the unit to 4,200 feet at its northern edge, adjacent to the Minidoka National Wildlife Refuge. Vegetation in the area is primarily native grass and big sagebrush types with large areas of wheatgrass seedings. Antelope may be found on 33,304 acres of the area on a yearlong basis. The area also provides some habitat for pheasant and other upland game species. Eight grazing allotments are located in the unit, two of which are used only as buffer pastures for emergency needs.

The Oregon Trail, a National Historic Trail, crosses the unit south of Interstate 86. This segment, approximately seven miles long, has been identified for protection, preservation, and interpretation in the recently completed National Park Service Management Plan.

Management Area 13 - SUBLETT

This area consists of 40,864 acres of public land. It includes lands adjacent to the Sublett Division, Sawtooth National Forest - Sublett/Meadow Creek area on the south, Eagle Point on the west, and Heglar Canyon/Badger Mountain on the north. North Chapin Mountain is also included in the unit. Elevation ranges from 6,717 feet on the Meadow Creek-Cold Spring Creek divide to 4,650 feet along the lower slopes of North Chapin Mountain. Sagebrush and native grass are the dominant vegetation types in the area, but significant acreages of juniper, mountain shrub, and aspen communities are also found throughout the unit. There are 2,533 acres identified as woodland habitat. A limited amount (two acres) of wetland/riparian habitat has been identified in the unit. Mule deer are abundant in the area with 25,725 acres identified as winter range. An important mule deer migration route lies between summer habitat in the Sublett Range and winter range in the Black Pine Mountains. Sage grouse utilize 32,885 acres as general habitat with 3,481 acres identified as brood-rearing habitat. Hunting is the primary recreational use of the area with winter activities often originating in the unit before moving onto the National Forest. There are eleven grazing allotments in the management area.

Management Area 14 - ISOLATED WILDLIFE TRACTS

This area includes 3,965 acres scattered among 36 isolated tracts of public land managed for upland game habitat under the Sikes Act. The tracts are generally flat to gently rolling. A wide variety of vegetation occurs on the tracts, including annual grasses, big sagebrush, and greasewood communities. These tracts provide important habitat for pheasant and Hungarian partridge, a wide variety of birds of prey, and non-game birds. The principal uses of these tracts are for hunting and wildlife habitat, particularly wintering and nesting habitat. Clean farming practices on adjacent private lands force wildlife to rely heavily on these isolated parcels for food and thermal cover during the critical winter period. Portions of several tracts are farmed under cooperative agreements which require that portions of farmed areas be left unharvested for wildlife habitat. Three tracts are grazed by livestock.

RESOURCE MANAGEMENT OBJECTIVES AND REQUIRED ACTIONS

Management objectives are the heart of each RMP alternative. All subsequent decisions concerning the management, use, and development of the planning area will be directed toward achieving these objectives and, thus, fulfilling the alternative's purpose. Management objectives provide a framework for conservation and wise use of the planning area's resources, for integrating public lands into the regional environment, and for accommodating State and national level management policies.

Resource management objectives are established for each of the management areas and sub areas. Objectives represent goals or desired conditions to be worked toward. These objectives are frequently quantified outputs or levels of services such as AUMs of forage, number of mule deer, acres for transfer out of federal ownership, etc. Objectives spell out ends rather than means. As such they do not foreclose management options during site specific implementation of the alternative.

Objectives are designed to meet management concerns or reflect public issues. Hence, objectives for a management area may vary between alternatives. For example, objectives for one alternative may be designed to produce high livestock, motorized recreation, and minerals outputs while another may produce medium livestock, high wildlife, and low minerals outputs.

All objectives have certain characteristics in common. They are: well defined and quantified when possible; concern or issue oriented; based upon a 10 to 20 year planning horizon to provide management and budgetary flexibility; reasonable and cost effective; and involve a land use decision.

Required actions are specific actions needed to achieve the management objectives for the management area or sub area. Required actions control the type and degree of land use, establish any constraints or conditions necessary to meet the management objectives, and indicate land areas requiring more detailed activity plans.

Examples of the types of required actions that may be included are: areas open, closed and limited to motorized vehicles; areas open or closed to energy

leasing or the harvest of woodland products; areas where maximum or limited fire suppression should be used; the acreage available for land treatment to increase livestock forage; etc.

ALTERNATIVES CONSIDERED IN DETAIL

Four alternatives and one sub alternative are presented in this section. Each of these alternatives meets the requirements of FLPMA. Each is based on public input and represents, to the extent practical, the most cost efficient combination of management practices for resolving the issues. Each of the alternatives is described in terms of its overall management emphasis, its specific resource goals and required resource actions (by management area), and how forage use levels were determined. Initial and long-term stocking levels were determined according to the methodology discussed in Appendix A.

ALTERNATIVE A (Proposed Action for Livestock Grazing)

This alternative is the "No Action" alternative. Basically, this alternative would continue the current management philosophy and direction of the 1974 Management Framework Plan (MFP). Existing activity management plans will continue to be implemented. Current on-the-ground management will continue. Under this alternative the use of lands and resources will remain essentially unchanged from the present or will reflect only changes identified in decisions in the current MFP. Livestock use will be the six year average use and wildlife will be at current levels as shown in Table 2-2.

RESOURCE MANAGEMENT OBJECTIVES BY MANAGEMENT AREA. The following discussion provides the specific objectives developed for each of the 14 management areas. Information presented in Tables 2-1, 2-2, and 2-9 provides additional detail about the management direction for each area. See Map 2-2.

(1) Milner. Moderate Use. Emphasis is on managing the area for multiple uses, providing for a variety of resource uses including upland game and waterfowl habitat, various recreational activities, and livestock grazing. Historical values, including the Oregon Trail, will be protected and interpretive facilities provided. Withdraw public lands in the area from entry under the general land laws and mining and mineral leasing laws. Provide forage for livestock and mule deer as shown in Table 2-2. Continue current Recreation and Public Purposes Act leases (80 acre archery range and 60 acre trap range) held by the City of Burley (Management Sub Area 1a - Intensive Use).

(2) Foothills. Moderate Use. Maintain or improve 12,728 acres of crucial deer winter range, 2,886 acres of sage grouse winter habitat, 2,837 acres of sage grouse brood-rearing habitat, and 44 acres of wetland/riparian habitat. Improve watershed conditions by improving 35,205 acres of rangeland currently in poor and fair condition and on 400 acres having soils with high present erosion. Provide forage for livestock and mule deer as shown in Table 2-2. Transfer from federal ownership 440 acres via private exchange and 6,320 acre via sale or other method of disposal.

(3) West Goose Creek. Moderate Use. Maintain or improve 9,686 acres of crucial deer winter range and 20 acres of wetland/riparian habitat. Reduce flood potential on 4,887 acres of flood prone watershed along Beaverdam Creek by improving ecologic condition and stabilizing drainage channels. Improve watershed conditions on 21,720 acres of rangeland currently in poor and fair condition and on 7,085 acres having soils with high present or potential erosion. Preserve scenic quality in the Goose Creek Travel Zone. Provide forage for livestock and mule deer as in Table 2-2.

(4) Middle Mountain. Moderate Use. Emphasize the management of 6,076 acres of crucial deer winter range, 1,704 acres of sage grouse winter habitat, 1,367 acres of sage grouse brood-rearing habitat, and 41 acres of wetland/riparian habitat. Improve watershed conditions on 35,819 acres of rangeland currently in poor and fair condition and on 12,796 acres having soils with high present or potential erosion. Preserve remnants of the California Trail and scenic values in the Goose Creek Travel Zone. Provide forage for livestock and mule deer as shown in Table 2-2. Control competitive land uses on 8,140 acres of quartzite deposits to protect the Oakley Stone mining industry (Management Sub Area 4a - Intensive Use).

(5) Administrative Site. Intensive Use. A warehouse/motorpool/office complex for the Burley BLM District is to be developed on this site.

(6) East Hills. Moderate Use. Improve watershed conditions by improving 2,412 acres of rangeland currently in poor and fair condition. Provide for dispersed recreational use and facility development consistent with public needs. Provide for utility rights-of-way within a corridor along the northwest edge of the unit. Provide forage for livestock and mule deer as shown in Table 2-2. Transfer from federal ownership 40 acres via private exchange.

(7) Albion. Moderate Use. Maintain or improve 1,787 acres of crucial deer winter range, 954 acres of sage grouse winter areas, 222 acres of sage grouse brood-rearing habitat, and nine acres of wetland/riparian habitat. Provide for dispersed recreational use and facility development to meet public need. Improve watershed conditions and forage production by improving 15,246 acres of rangeland currently in poor and fair condition. Provide forage for livestock and mule deer as shown in Table 2-2. Transfer from federal ownership 640 acres via private exchange and 120 acres via sale or other method of disposal.

(8) City of Rocks. Moderate Use. Provide for dispersed recreational uses and facility development to meet public needs. Preserve remnants of the California and Salt Lake Cut-off Trails. Manage 7,528 acres of crucial deer winter range and five acres of wetland/riparian habitat to maintain or improve wildlife habitat. Improve watershed conditions on 14,012 acres of rangeland currently in poor and fair condition and on 2,512 acres with high present or potential erosion. Provide forage for livestock and wildlife as shown in Table 2-2. Provide 520 pinyon pine Christmas trees from 1,015 acres for public (non-commercial) harvest biennially on a rotational basis with the U. S. Forest Service (Management Sub Area 8a - Moderate Use). Protect in its present state 1,628 acres of public land within the proposed City of Rocks National Monument until congressional action is taken (Management Sub Area 8b - Limited Use).

(9) Raft River Valley. Moderate Use. Maintain or improve 556 acres of sage grouse brood-rearing habitat, 36,445 acres of antelope habitat, and 18 acres of wetland/riparian habitat. Protect nesting ferruginous hawks from human disturbance. Preserve remnants of the Hudspeth Cut-off and Salt Lake Cut-off Trails. Encourage geothermal leasing and development within the Raft River Known Geothermal Resource Area. Provide for utility rights-of-way within a corridor in the southern half of the unit. Improve watershed conditions on 74,200 acres of rangeland currently in poor and fair condition and on 6,855 acres having soils with high potential erosion. Provide forage for livestock, mule deer, and antelope as shown in Table 2-2. Transfer from federal ownership 4,125 acres via private exchange and 16,990 acres via sale or other method of disposal. Accommodate rangeland research and experimental work within the 8,227 acre Point Springs Grazing Allotment (Management Sub Area 9a - Moderate Use).

(10) Jim Sage. Moderate Use. Emphasis is on the management of 22,780 acres of crucial deer winter range, 3,327 acres of antelope habitat, 5,730 acres of sage grouse winter areas, 1,201 acres of sage grouse brood-rearing areas, and 25 acres of wetland/riparian habitat to maintain or improve wildlife habitat. Protect nesting ferruginous hawks from human disturbance. Preserve remnants of the Hudspeth Cut-off Trail. Provide for dispersed recreational uses and facility development to meet public needs. Encourage geothermal leasing and development within the Raft River Known Geothermal Resource Area. Provide for utility rights-of-way within a corridor along the eastern edge of the area. Improve watershed conditions on 51,978 acres of rangeland currently in poor and fair condition and on 1,560 acres having soils with high potential erosion. Provide forage for livestock, mule deer, and antelope as shown in Table 2-2. Transfer from federal ownership 280 acres via private exchange and 120 acres via sale or other method of disposal. Designate and manage 27,250 acres as the Jim Sage Natural Area. Acquire State and private inholdings in this area (Management Sub Area 10a - Limited Use).

(11) Cotterel Mountain. Moderate Use. Manage Cotterel Mountain as an open space, scenic area. Improve physical access along the ridge road. Maintain or improve 6,414 acres of crucial deer winter range, 703 acres of sage grouse brood-rearing habitat, 4,949 acres of antelope habitat, and 26 acres of wetland/riparian habitat. Protect nesting ferruginous hawks from human disturbance. Improve watershed conditions on 31,212 acres of rangeland currently in poor and fair condition and on 5,677 acres having soils with high potential erosion. Preserve remnants of the California Trail. Provide for utility rights-of-way in a corridor along the eastern edge of the unit. Provide forage for livestock, mule deer, and antelope as shown in Table 2-2. Transfer from federal ownership 40 acres via private exchange, 3,040 acres via sale or other method of disposal, and 1,124 acres via State exchange.

(12) Highway Unit. Moderate Use. Improve watershed conditions on 17,348 acres of rangeland currently in poor and fair condition. Manage 33,304 acres of antelope range for improved wildlife habitat. Provide for utility rights-of-way in a corridor in the western portion of the area. Provide forage for livestock, mule deer, and antelope as shown in Table 2-2. Transfer from federal ownership 240 acres via sale or other method of disposal. Preserve visual remnants of the Oregon Trail (Management Sub Unit 12a - Limited Use).

(13) Sublett. Moderate Use. Manage 5,777 acres of crucial deer winter range, 255 acres of antelope habitat, and 3,481 acres of sage grouse nesting

TABLE 2-1

Required Actions - Alternative A

I.O.		MANAGEMENT AREA (OR SUB AREA)	CLASS	FEDERAL ACRES**	ENERGY RESOURCES			FIRE MGMT.		GRAZING MGMT.		LANDS		MINERALS				MOTORIZED VEHICLE MGMT.				WILDLIFE WATER PROTECT/IMPROVE				WILDLIFE HABITAT - PROTECT/IMPROVE											
					Open	Closed	Seasonal Closure	No Surface Occupancy	Limited Suppression	Maximum Suppression	Prescribed Burning	Grazing Excluded	Improvements Excluded	Treatments Excluded	Landfills Excluded	Rights-of-Way Excl/Restr	Withdrawal - Gen. Land Law	Leasables - Open	Locatables - Open	Locatables - Closed	Salables - Open	Salables - Closed	Wheeled - Open	Wheeled - Closed	Over Snow - Open	Over Snow - Closed	Facility Develop. Ident.	Special Designation	Flood Control Measures	Erosion Control Measures	Mule Deer - Critic. Winter	Antelope	Sage Grouse - Critical*	Sage Grouse - All Habs.	Perennial Grass	Open to Harvest	Closed to Harvest
1	1	MILNER	MOD	2,095	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1a	R & PP LEASES	INT	140	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2	2	FOOTHILLS	MOD	48,394	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
3	3	WEST GOOSE CREEK	MOD	27,260	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4	4	MIDDLE MOUNTAIN	MOD	40,608	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	4a	OAKLEY STONE AREA	INT	8,140	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
5	5	ADMINISTRATIVE SITE	INT	19	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	6	EAST HILLS	MOD	3,711	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6	7	ALBION	MOD	21,300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
5	8	CITY OF ROCKS	MOD	17,877	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	8a	PINON PINE AREA	MOD	1,015	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
6	8b	CITY OF ROCKS CORE	LIM	1,628	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
9	9	RAFT RIVER VALLEY	MOD	106,684	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	9a	POINT SPRINGS	MOD	8,227	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
7	10	JIM SAGE	MOD	76,667	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	10a	NATURAL AREA	LIM	27,250	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
8	11	COTTEREL MOUNTAIN	MOD	40,967	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
9	12	HIGHWAY UNIT	MOD	45,894	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10	12a	OREGON TRAIL	LIM	560	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10	13	SUBLETT	MOD	40,864	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
11	13a	WINTER USE AREAS	MOD	160	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	14	ISOLATED WILDLIFE TRACTS	LIM	3,965	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

*Crucial sage grouse habitat includes strutting, brood-rearing, and winter use areas.

**Sub Area acreage is included in total acreage for the Management Area.

NOTE: -42 miles of historic trails (3,360 acres - a corridor 330 feet either side of trail) will be withdrawn from the general land laws and the mining and mineral leasing laws. Energy leasing will be allowed subject to no surface occupancy. Sale of mineral materials is prohibited. No ground disturbing activities will be allowed.

-Future powerline rights-of-way will be restricted to existing powerline corridors (8,160 acres - 51 miles of powerline corridors at 1,320 feet in width).

-72,775 acres of crucial deer winter range is closed to motorized vehicle use December through April.

1 Designate the area a Special Recreation Management Area. Milner Bicentennial Site (180 acres) closed to motorized vehicle use.

2 Limited suppression on 19,055 acres. Maximum suppression on 8,213 acres. Open to harvest of woodland products north of Trapper Creek and east of Goose Creek Reservoir (8,751 acres). Remainder of area (18,517 acres) closed.

3 Limited Suppression on 36,920 acres. Maximum suppression on 3,748 acres.

4 Closed to withdrawals restricting the location of mining claims. Allow Oakley to continue using springs in the area as a municipal water supply.

5 Open to harvest of 520 pinyon Christmas trees biennially. Closed to all other harvest of woodland products.

6 Designate the area a Special Recreation Management Area. No additional recreation facilities permitted.

7 Area is to be designated a Natural Area. Closed to harvest of woodland products on 6,800 acres on the south end which will remain open until formal designation occurs.

8 Area will be managed as an "Open Space Scenic Area." Upgrade the "Cotterel Ridge Road." New communication facilities restricted to current location. Open to harvest of woodland products on 6,250 acres in the Nibbs Creek/Rice Creek area. Remainder of unit (34,717 acres) closed.

9 Designate the area a Special Recreation Management Area.

10 No vegetation manipulation allowed in Meadow Creek deer migration area.

11 Motorized vehicle use limited to designated routes December through April to allow access to U.S.F.S. winter use areas.

areas to maintain or improve wildlife habitat. Enhance watershed conditions by improving 24,674 acres of rangeland currently in poor and fair condition. Provide for dispersed recreational uses and facility development to meet public need. Provide forage for livestock, mule deer, and antelope as shown in Table 2-2. Transfer from federal ownership 160 acres via private exchange. Develop winter sports use areas, in coordination with other agencies and organizations, at North Heglar Canyon (40 acres) and Sublett Reservoir (120 acres) (Management Sub Area 13a - Moderate Use).

(14) Isolated Tracts. Limited Use. Manage these tracts for the protection and enhancement of upland game bird and non-game bird wildlife habitat. Provide forage for livestock and mule deer as shown in Table 2-2.

GRAZING MANAGEMENT. The stocking levels under this alternative are based on current use. The initial and long-term stocking level for livestock is the six year average licensed use (Table 2-2 and allotment specific in Appendix A, Table 1). Big game forage assignments are based on current population estimates provided by the Idaho Department of Fish and Game. Current grazing systems and seasons of use will be continued (Appendix B). Maintenance of existing range improvements and land treatments will continue at current levels.

TABLE 2-2

Proposed Forage Use - Alternative A

Management Area No. Name	Initial & Long-Term Livestock Use Level (AUMs)	Mule Deer Use Level (AUMs)	Antelope Use Level (AUMs)
1 Milner	151	11	- -
2 Foothills	3,686	1,174	- -
3 West Goose Creek	2,356	676	- -
4 Middle Mountain	6,986	1,111	- -
5 Administrative Site	- -	- -	- -
6 East Hills	332	124	- -
7 Albion	3,020	1,052	- -
8 City of Rocks	1,643	453	- -
9 Raft River Valley	14,524	338	86
10 Jim Sage	5,247	1,763	6
11 Cotterel	3,857	768	22
12 Highway Unit	10,711	167	45
13 Sublett	5,694	2,233	8
14 Isolated Tracts	109	48	- -
Total	58,316	9,918	167

For Allotment-specific information see Appendix A.

ALTERNATIVE B

This alternative is directed toward the production and use of marketable resource commodities. Management emphasis is on maximizing livestock production, harvest of woodland products, mining, and mineral and energy

development. Management direction is toward facility-dependent and motorized dispersed recreation. Forage will be assigned only to meet current wildlife demand. All minimum environmental protection standards legally required will be met as will statewide resource management guidelines.

RESOURCE MANAGEMENT OBJECTIVES BY MANAGEMENT AREA. The following discussion provides the specific objectives developed for each of the 14 management areas. Information presented in Tables 2-3, 2-4, and 2-9 provides additional detail about the management direction for each area. See Map 2-3.

(1) Milner. Intensive Use. Emphasize the provision of opportunities for both land and water based dispersed recreation activities. Improve 932 acres of poor condition rangeland to good. Provide forage for livestock and mule deer as shown in Table 2-4. Other resource uses, such as mineral and energy development, are allowed with few restrictions.

(2) Foothills. Moderate Use. Emphasis is on livestock grazing and the use and development of other marketable resources with few restrictions. Improve 35,405 acres of poor and fair condition rangeland to good. Provide forage for livestock and mule deer as shown in Table 2-4. Transfer from federal ownership 520 acres via private exchange and 600 acres via sale or other method of disposal.

(3) West Goose Creek. Moderate Use. Livestock grazing and the use and development of other resources with limited restrictions are emphasized. Improve 21,720 acres of poor and fair condition rangeland to good. Provide forage for livestock and mule deer as shown in Table 2-4. Transfer from federal ownership 200 acres via State exchange.

(4) Middle Mountain. Moderate Use. Emphasis is on livestock grazing, the mining of quartzite (Oakley stone), and the use and development of other resources with limited restrictions. Improve 35,810 acres of poor and fair condition rangeland to good. Provide forage for livestock and mule deer as shown in Table 2-4. Transfer from federal ownership 1,000 acres via private exchange, 40 acres via sale or other method of disposal, and 2,759 acres via State exchange. Control competitive land uses on 6,800 acres of quartzite deposits to protect the Oakley stone mining industry (Management Sub Area 4a - Intensive Use).

(5) Administrative Site. Intensive Use. A warehouse/motorpool/office complex for the Burley BLM District is to be developed on this site.

(6) East Hills. Intensive Use. Provide for a high level of off-road vehicle use, particularly trailbike use. Livestock grazing and other resource uses will be permitted with few restrictions. Improve 2,412 acres of poor and fair condition rangeland to good. Provide forage for livestock and mule deer as shown in Table 2-4. Transfer from federal ownership 400 acres via private exchange and 326 acres via sale or other method of disposal.

(7) Albion. Moderate Use. Emphasize livestock grazing and the use and development of other marketable resources with limited restrictions. Improve 15,246 acres of poor and fair condition rangeland to good. Provide forage for livestock and mule deer as shown in Table 2-4. Transfer from federal ownership 280 acres via private exchange and 1,120 acres via sale or other method of disposal.

(8) City of Rocks. Moderate Use. Emphasis is on livestock grazing, non-commercial harvest of pinyon pine Christmas trees, and the use and development of other resources with few restrictions. Improve 14,012 acres of poor and fair condition rangeland to good. Provide forage for livestock and mule deer as shown in Table 2-4. Transfer from federal ownership 80 acres via private exchange and 40 acres via sale or other method of disposal. Provide 750 pinyon pine Christmas trees from 1,440 acres for public (non-commercial) harvest biennially on a rotational basis with the U. S. Forest Service (Management Sub Area 8a - Moderate Use).

(9) Raft River Valley. Moderate Use. - Livestock grazing, rangeland research, protection of critical floodplains, and development of marketable resources are stressed. Improve 74,200 acres of poor and fair condition rangeland to good. Provide forage for livestock, mule deer, and antelope as shown in Table 2-4. Transfer from federal ownership 3,194 acres via private exchange and 2,349 acres via sale or other method of disposal. Transfer 1,482 acres to the U. S. Forest Service. Accommodate rangeland research and experimental work within the 8,227 acre Point Springs Grazing Allotment (Management Sub Area 9a - Moderate Use). Manage 2,000 acres of critical floodplain along Warm, Meadow, Shirley, and One Mile Creeks to increase plant cover, improve channel stability, and reduce flood potential (Management Sub Area 9b - Limited Use).

(10) Jim Sage. Moderate Use. Emphasize livestock grazing and the use and development of other resources with limited restrictions. Improve 51,978 acres of poor and fair condition rangeland to good. Provide forage for livestock, mule deer, and antelope as shown in Table 2-4. Transfer from federal ownership 560 acres via sale or other method of disposal.

(11) Cotterel Mountain. Moderate Use. Expanding recreation opportunities on the South Cotterel Allotment is emphasized. Livestock grazing and the use and development of other resources with limited restrictions is allowed. Improve 31,212 acres of poor and fair condition rangeland to good. Provide forage for livestock, mule deer, and antelope as shown in Table 2-4. Transfer from federal ownership 280 acres via private exchange and 280 acres via sale or other method of disposal.

(12) Highway Unit. Moderate Use. Emphasis is on livestock grazing and developing other marketable resources with few restrictions. Improve 17,348 acres of poor and fair condition rangeland to good. Provide forage for livestock, mule deer, and antelope as shown in Table 2-4. Transfer from federal ownership 240 acres via sale or other method of disposal. Protect seven miles of the Oregon Trail by restricting surface disturbing activities within a 330 foot buffer (560 acres) along each side of the trail (Management Sub Area 12a - Limited Use).

(13) Sublett. Moderate Use. Livestock grazing and the use and development of other marketable resources with limited restrictions are emphasized. Improve 24,674 acres of poor and fair condition rangeland to good. Provide forage for livestock, mule deer, and antelope as shown in Table 2-4. Transfer from federal ownership 250 acres via private exchange and 80 acres via sale or other method of disposal. Transfer 560 acres to the U. S. Forest Service.

(14) Isolated Tracts. Moderate Use. Manage for the production of upland game bird habitat. Enter into cooperative farm agreements with private landowners

TABLE 2-3

Required Actions - Alternative B

ALTERNATIVE B													
NO.	MANAGEMENT AREA (OR SUB AREA)	CLASS	FEDERAL ACRES**	ENERGY RESOURCES									
				Open	Closed	Seasonal Closure	No Surface Occupancy	Limited Suppression	Maximum Suppression	Prescribed Burning	Grazing Excluded	Improvements Excluded	Treatments Excluded
1	MILNER	INT	2,055	●									
2	FOOTHILLS	M00	48,394	●				●					
3	WEST GOOSE CREEK	M00	27,268	●				●					
4	MIDDLE MOUNTAIN	M00	40,608	●				●					
4a	OAKLEY STONE AREA	INT	6,800	●					●				
5	ADMINISTRATIVE SITE	INT	19		●			●					
6	EAST HILLS	INT	3,711	●				●					
7	ALBION	M00	21,300	●				●					
8	CITY OF ROCKS	M00	17,877	●				●					
8a	PINYON PINE AREA	M00	1,440	●					●				
9	RAFT RIVER VALLEY	M00	106,684	●				●					
9a	POINT SPRINGS	M00	8,227	●				●					
9b	CRITICAL FLOODPLAINS	LIM	2,000		●			●					
10	JIM SAGE	M00	76,667	●				●					
11	COTTEREL MOUNTAIN	M00	40,967	●				●					
12	HIGHWAY UNIT	M00	45,894	●				●					
12a	OREGON TRAIL	LIM	560						●				
13	SUBLETT	M00	40,864	●				●					
14	ISOLATED WILDLIFE TRACTS	M00	3,965	●									

to increase the production of wildlife food crops while stimulating the local agricultural economy. Manage the 20 acres known as the "Duncan Tract" for motorcycle use. Provide forage for livestock and mule deer as shown in Table 2-4. Transfer from federal ownership 1,040 acres via sale or other method of disposal.

GRAZING MANAGEMENT. The proposed stocking rates (Table 2-4 and Appendix A, Table 1) were developed with the intention of providing vigorous, palatable rangeland vegetation on a sustained yield basis. This would satisfy the objective of providing for the physiological requirements of the vegetation so that the public rangelands are maintained in a healthy, productive condition.

Stocking rates are shown in animal unit months (AUMs). Each allotment was evaluated on its own merits in arriving at an initial stocking rate. The evaluation included such things as long-term actual use, utilization, trend, condition, suitability, plant phenology, and precipitation and temperature data. Based on the results of monitoring, this initial stocking rate will be adjusted as necessary to assure a stocking level at which the range vegetation (forage plants) may be utilized without being detrimentally affected. In general, this proper use level will be 40 percent on native range and 60 percent on seeded range. Adjustments to achieve the proper stocking level may be made in the season of use, the level of AUMs, or at activity planning stages in the management system used to regulate livestock grazing patterns.

The initial stocking rate for cattle and sheep would be 62,150 AUMs, 7 percent above the six-year (1976-1981) average licensed grazing use. An additional 23,118 AUMs would accrue through 117,930 acres of new land treatments (Map

TABLE 2-4

Proposed Forage Use - Alternative B

Management Area		Initial	Acres	Long-Term	Mule Deer	Antelope
		Livestock	to be	Livestock Use	Use Level	Use Level
No.	Name	Use Level	Treated	Level Goal	(AUMs)	(AUMs)
		(AUMs)		(AUMs)		
1	Milner	140	634	226	11	-
2	Foothills	4,157	5,059	5,221	1,174	-
3	West Goose Creek	2,560	2,869	3,117	676	-
4	Middle Mountain	6,521	8,669	7,402	1,111	-
5	Administrative Site	- -	- -	- -	- -	-
6	East Hills	369	441	452	124	-
7	Albion	2,729	10,276	4,479	1,052	-
8	City of Rocks	1,491	2,096	1,909	453	-
9	Raft River Valley	14,898	43,905	23,707	338	86
10	Jim Sage	5,456	27,914	11,667	1,763	6
11	Cotterel	4,669	5,509	5,520	768	22
12	Highway Unit	12,602	1,988	13,797	167	45
13	Sublett	6,420	8,540	7,620	2,233	8
14	Isolated Tracts	138	30	151	48	-
Total		62,150	117,930	85,268	9,918	167

For Allotment-specific information see Appendix A.

2-4). A total of 85,268 AUMs would then be available for livestock as these treatments are completed. This would result in the long-term use level being a 46 percent above the six year average licensed use.

Livestock would continue to utilize the allotments under present grazing systems or new systems would be developed to enhance rangeland conditions and improve livestock husbandry. Seasons of use would be according to Appendix B.

Present mule deer and antelope populations would be accommodated by forage assignments of 9,918 and 166 AUMs respectively, but forage would not be assigned for future population growth.

ALTERNATIVE C (Preferred Alternative)

This alternative emphasizes a balanced approach to land management. The alternative is designed to provide for a variety of renewable resource uses within the sustained yield capabilities of the public lands in the Cassia RMP area. It represents a balancing of conflicts and tradeoffs between land uses while protecting fragile, non-renewable resources as required by law. Management attention would be directed toward improving rangeland conditions; expanding livestock grazing opportunities; increasing forage production for mule deer and antelope; maintaining or improving upland and non-game wildlife habitat; a variety of recreation opportunities; and meeting local needs for sand, gravel, and building stone. This management direction would favorably influence orderly economic growth of the local and regional economy.

RESOURCE MANAGEMENT OBJECTIVES BY MANAGEMENT AREA. The following discussion provides the specific objectives developed for each of the 14 management areas. Information presented in Tables 2-5, 2-6, and 2-9 provides additional detail about the management direction for each area. See Map 2-5.

(1) Milner. Moderate Use. Manage for the provision of quality wildlife habitat for upland game, waterfowl, and non-game species. Provide for dispersed recreation including water based activities. Maintain the current Recreation and Public Purposes leases held by the City of Burley. Protect cultural and historic values and provide for their interpretation. Restrict surface disturbing activities in a 330 foot buffer either side of the Oregon Trail. Improve 932 acres of poor condition rangeland to good. Provide forage for livestock and mule deer as shown in Table 2-6.

(2) Foothills. Moderate Use. Maintain or improve 12,728 acres of crucial deer winter range, 2,886 acres of sage grouse winter habitat, and 2,837 acres of sage grouse brood-rearing habitat, and 5.9 miles of Dry Creek and its tributaries. Control surface disturbing activities on 400 acres having soils with high present erosion. Improve 35,405 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-6. Transfer from federal ownership 520 acres via private exchange.

(3) West Goose Creek. Moderate Use. Protect and conserve cultural resources on 27,106 acres by managing other uses consistent with cultural values. Maintain or improve 9,686 acres of crucial deer winter range. Control surface disturbing activities on 7,085 acres having soils with high present or potential erosion. Reduce flood potential on 4,887 acres of flood prone watershed

along Beaverdam Creek. Preserve scenic quality in the Goose Creek Travel Zone (within 1/2 mile of the Goose Creek Road between Wilson Pass and the Utah border). Improve 21,720 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-6. Transfer from federal ownership 200 acres via State exchange.

(4) Middle Mountain. Moderate Use. Facilitate the orderly development of the building stone resource. Maintain or improve 6,076 acres of crucial deer winter range, 1,704 acres of sage grouse winter habitat, and 1,367 acres of sage grouse brood-rearing habitat. Control surface disturbing activities on 12,796 acres having soils with high present or potential erosion. Preserve scenic quality in the Goose Creek Travel Zone (within 1/2 mile of the Goose Creek road between Wilson Pass and the Utah border). Improve 35,819 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-6. Transfer from federal ownership 600 acres via private exchange, 40 acres via sale or other method of disposal, and 2,759 acres via State exchange. Manage 480 acres to ensure a safe and adequate supply of domestic water for the City of Oakley (Management Sub Area 4a - Limited Use).

(5) Administrative Site. Intensive Use. A warehouse/motorpool/office complex for the Burley BLM District is to be developed on this site.

(6) East Hills. Moderate Use. Improve 2,412 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-6. Transfer from federal ownership 200 acres via private exchange.

(7) Albion. Moderate Use. Maintain or improve 1,787 acres of crucial deer winter range, 954 acres of sage grouse winter habitat, and 222 acres of sage grouse brood-rearing habitat. Improve 15,246 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-6. Transfer from federal ownership 240 acres via private exchange and 480 acres via sale or other method of disposal.

(8) City of Rocks. Moderate Use. Emphasize the management of 7,528 acres of crucial deer winter range. Control surface disturbing activities on 2,512 acres having soils with high potential erosion. Improve 14,012 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-6. Transfer from federal ownership 80 acres via private exchange and 40 acres via sale or other method of disposal. Provide 520 pin- yon pine Christmas trees from 1,015 acres for public (non-commercial) harvest biennially on a rotational basis with the U. S. Forest Service (Management Sub Area 8a - Moderate Use). Preserve the geologic, historic, and scenic values on 1,628 acres known as the City of Rocks, upholding the integrity of National Natural Landmark and National Historic Landmark designations for the area (Management Sub Area 8b - Limited Use).

(9) Raft River Valley. Moderate Use. Control surface disturbing activities on 6,855 acres having soils with high potential erosion. Maintain or improve 556 acres of sage grouse brood-rearing habitat. Protect nesting ferruginous hawks from human disturbance. Improve 74,200 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-6. Transfer from federal ownership 3,324 acres via private exchange and 2,149 acres via sale or other method of disposal. Transfer 1,482

acres to the U. S. Forest Service. Accommodate rangeland research and experimental work within the 8,227 acre Point Springs Grazing Allotment (Management Sub Area 9a - Moderate Use). Manage 2,000 acres of critical floodplain along Warm, Meadow, Shirley, and One Mile Creeks to increase plant cover, improve channel stability, and reduce flood potential (Management Sub Area 9b - Limited Use).

(10) Jim Sage. Moderate Use. Protect natural qualities on 11,227 acres lying above 6,600 feet in elevation. Maintain or improve 22,780 acres of crucial deer winter range, 5,730 acres of sage grouse winter habitat, and 1,201 acres of sage grouse brood-rearing habitat. Protect nesting ferruginous hawks from human disturbance. Control surface disturbing activities on 1,560 acres having high potential erosion. Improve 51,978 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-6. Transfer from federal ownership 280 acres via sale or other method of disposal.

(11) Cotterel Mountain. Moderate Use. Expand recreation opportunities on 18,000 acres south of the FAA communication site. Manage the area to maintain scenic quality and open space. Maintain or improve 6,414 acres of crucial deer winter range and 703 acres of sage grouse brood-rearing habitat. Protect nesting ferruginous hawks from human disturbance. Control surface disturbing activities on 5,677 acres having soils with high potential erosion. Improve 31,212 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-6. Transfer from federal ownership 280 acres via private exchange and 160 acres via sale or other method of disposal.

(12) Highway Unit. Moderate Use. Improve 17,348 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-6. Transfer from federal ownership 240 acres via sale or other method of disposal. Protect approximately seven miles of the Oregon Trail by restricting surface disturbing uses within a 330 foot buffer (560 acres) along each side of the trail (Management Sub Area 12a - Limited Use).

(13) Sublett. Moderate Use. Maintain or improve 5,777 acres of crucial deer winter range and 3,481 acres of sage grouse brood-rearing habitat. Improve 24,674 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-6. Transfer from federal ownership 80 acres via private exchange and 80 acres via sale or other method of disposal. Transfer 560 acres to the U. S. Forest Service.

(14) Isolated Tracts. Limited Use. Increase non-game and upland game wildlife populations by improving food, water, and cover. Provide forage for mule deer and livestock as shown in Table 2-6.

GRAZING MANAGEMENT. Livestock forage was assigned under the same procedures described in Alternative B. The initial stocking rate of 62,150 AUMs, the same as that for Alternative B, is 7 percent greater than the six year average actual licensed use. There are 82,716 acres that have the potential for land treatment, and could produce an additional 15,958 AUMs of forage (Map 2-4). This additional forage would bring the long-term stocking level up to 78,108 AUMs, 34 percent above the six year average use. Alternative C has 35,754 acres fewer land treatments proposed than Alternative B. This 30 percent

difference in land treatments is a result of interdisciplinary coordination that lessened the magnitude of or eliminated conflicts such as foregoing treatments on potentially erosive soils, in crucial wildlife habitat, and on fragile watersheds. See Table 2-6 and Appendix A, Table 2.

Livestock would continue to utilize the allotments under present management systems or grazing management systems would be developed to enhance rangeland conditions. Seasons of use would be according to Appendix B.

The use level for big game includes 13,596 AUMs for mule deer and 721 AUMs for antelope. This level of use would satisfy Idaho Department of Fish and Game projections for 1995.

TABLE 2-6

Proposed Forage Use - Alternative C

Management Area No. Name	Initial Livestock Use Level (AUMs)	Acres to be Treated	Long-Term Livestock Use Level Goal (AUMs)	Mule Deer Use Level (AUMs)	Antelope Use Level (AUMs)
1 Milner	140	200	167	11	-
2 Foothills	4,157	3,900	4,976	1,745	-
3 West Goose Creek	2,560	1,736	2,902	1,076	-
4 Middle Mountain	6,521	6,670	7,172	1,495	-
5 Administrative Site	- -	- -	- -	- -	-
6 East Hills	369	425	449	124	-
7 Albion	2,729	5,748	3,646	1,297	-
8 City of Rocks	1,491	1,274	1,737	605	23
9 Raft River Valley	14,898	30,535	20,787	446	305
10 Jim Sage	5,456	19,825	9,877	2,288	127
11 Cotterel	4,669	3,900	5,278	1,027	162
12 Highway Unit	12,602	1,988	13,797	180	96
13 Sublett	6,420	5,975	7,177	3,243	8
14 Isolated Tracts	138	- -	143	59	-
Total	62,150	82,176	78,108	13,596	721

For Allotment-specific information see Appendix A.

ALTERNATIVE D

Emphasis in this alternative is on the non-consumptive use of resources. Management direction is toward the preservation and protection of wildlife habitat, scenic values, watershed values, and cultural resources. Resource dependent and non-motorized dispersed recreation is emphasized. Wildlife forage requirements through 1995 will be met. Other resource outputs may be reduced or eliminated from specific areas to enhance the non-consumptive uses of the public lands.

RESOURCE MANAGEMENT OBJECTIVES BY MANAGEMENT AREA. The following discussion provides the specific objectives developed for each of the 14 management areas. Information presented in Table 2-7, 2-8, and 2-9 provides additional detail about the management direction for each area. See Map 2-6.

(1) Milner. Limited Use. Emphasis is on managing the area to provide quality wildlife habitat for upland game, waterfowl, and non-game species. Protect cultural and historical values and provide for their interpretation. Provide for present City of Burley recreational facilities. Improve 932 acres of poor condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-8.

(2) Foothills. Limited Use. Emphasize the provision of optimum habitat conditions on 33,136 acres of deer winter range, 28,016 acres of sage grouse habitat, and 44 acres of wetland/riparian habitat. Control surface disturbance on 400 acres having soils with high present erosion. Improve 35,405 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-8.

(3) West Goose Creek. Limited Use. Provide optimum habitat conditions on 10,321 acres of deer winter range, 20,021 acres of sage grouse habitat, and 20 acres of wetland/riparian habitat. Control surface disturbance on 7,085 acres having soils with high present or potential erosion. Reduce flood potential on 4,887 acres of flood prone watershed along Beaverdam Creek. Protect and conserve cultural resources by managing other uses consistent with cultural values. Improve 21,720 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-8.

(4) Middle Mountain. Moderate Use. Provide optimum habitat condition on 15,041 acres of deer winter range, 32,476 acres of sage grouse habitat, and 41 acres of wetland/riparian habitat. Control surface disturbance on 12,796 acres having soils with high present or potential erosion. Improve 35,819 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-8. Manage 480 acres to ensure a safe and adequate supply of domestic water for the City of Oakley (Management Sub Area 4a - Moderate Use).

(5) Administrative Site. Intensive Use. A warehouse/motorpool/office complex for the Burley BLM District is to be developed on this site.

(6) East Hills. Moderate Use. Provide optimum habitat conditions on 2,708 acres of deer winter range. Improve 23,412 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-8.

(7) Albion. Limited Use. Emphasize the provision of optimum habitat conditions on 3,816 acres of mule deer winter range, 15,629 acres of sage grouse habitat, and nine acres of wetland/riparian habitat. Improve 15,246 acres of poor and fair condition rangeland to good. Provide forage for mule deer and livestock as shown in Table 2-8.

(8) City of Rocks. Limited Use. Emphasis is on the provision of optimum habitat conditions on 9,277 acres of deer winter range, 11,818 acres of sage grouse habitat, and five acres of wetland/riparian habitat. Improve 14,012 acres of poor and fair condition rangeland to good. Control surface disturbing activities on 2,512 acres having soils with high present erosion. Provide forage for mule deer, antelope, and livestock as shown in Table 2-8. Manage 1,440 acres of pinyon pine to maintain and protect this rare Idaho woodland species (Management Sub Area 8a - Limited Use). Preserve the geologic, historic, and scenic values on 1,629 acres known as the City of Rocks,

upholding the integrity of National Natural Landmark and National Historic Landmark designations for the area (Management Sub Area 8b - Limited Use).

(9) Raft River Valley. Moderate Use. Emphasize the provision of optimum habitat conditions on 36,445 acres of antelope habitat, 61,763 acres of sage grouse habitat, and 18 acres of wetland/riparian habitat. Protect nesting ferruginous hawks from human disturbance. Control surface disturbing activities on 6,855 acres having soils with high potential erosion. Improve 74,200 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-8. Transfer from federal ownership 320 acres via sale or other method of disposal. Accommodate rangeland research and experimental work within the 8,227 acres Point Springs Grazing Allotment (Management Sub Area 9a - Moderate Use). Manage 2,000 acres of critical floodplain along Warm, Meadow, Shirley, and One Mile Creeks to increase plant cover, improve channel stability and reduce flood potential (Management Sub Area 9b - Limited Use).

(10) Jim Sage. Moderate Use. Provide optimum habitat conditions on 36,164 acres of deer winter range, 58,894 acres of sage grouse habitat, 3,327 acres of antelope habitat, and 25 acres of wetland/riparian habitat. Protect nesting ferruginous hawks from human disturbance. Control surface disturbing activities on 1,560 acres having soils with high potential erosion. Improve 51,978 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-8. Transfer from federal ownership 240 acres via sale or other method of disposal.

(11) Cotterel Mountain. Limited Use. Emphasize the provision of optimum habitat conditions on 18,607 acres of deer winter range, 4,949 acres of antelope habitat, 17,721 acres of sage grouse habitat, and 26 acres of wetland/riparian habitat. Protect nesting ferruginous hawks from human disturbance. Protect scenic vistas. Upgrade existing campgrounds at Coe Creek and McClendon Spring and provide for non-motorized use of the area. Control surface disturbing activities on 5,677 acres having soils with high potential erosion. Improve 31,212 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-8.

(12) Highway Unit. Moderate Use. Provide optimum habitat conditions on 33,304 acres of antelope habitat. Improve 17,348 acres of poor and fair condition rangeland to good. Provide forage for antelope, mule deer, and livestock as shown in Table 2-8. Protect eight miles of the Oregon Trail by restricting surface disturbing uses within a 660 foot buffer (1,160 acres) along each side of the trail (Management Sub Area 12a - Limited Use). Manage 8,355 acres adjacent to the Minidoka National Wildlife Refuge as open space and wildlife habitat (Management Sub Area 12b - Limited Use).

(13) Sublett. Limited Use. Provide optimum habitat conditions on 25,725 acres of deer winter range, 32,855 acres of sage grouse habitat, 255 acres of antelope habitat, and two acres of wetland/riparian habitat. Improve 24,674 acres of poor and fair condition rangeland to good. Provide forage for mule deer, antelope, and livestock as shown in Table 2-8.

(14) Isolated Tracts. Limited Use. Protect wildlife habitat by excluding competitive land uses. Increase wildlife populations by improving food, water, and cover. Provide forage for mule deer as shown in Table 2-8.

TABLE 2-7

Required Actions - Alternative D

ALTERNATIVE D

[illegible]

*Critical same grouse habitat includes creation of brood nesting and winter use areas. All wetland/riparian habitat is closed to mining activities (100 acres).

**Sub Area acreage is included in total acreage for the Management Area.

- 1 Provide for extensive cultural resource research and inventory.
- 2 Restrict surface disturbance within 200 feet of wetland areas. Utilize
- 3 structural means to protect the Oakley city water supply.
- 4 Area is to be designated an Area of Critical Environmental Concern because
- 5 of its historic, geologic, and scenic values. Consolidate land ownership
- 6 to facilitate management.
- 7 No new roads. All activities designed or managed to minimize sedimentation
- 8 and drainage failure and to protect floodplain functions.

GRAZING MANAGEMENT. The vegetation use objective of Alternative D is to maximize wildlife, fisheries, watershed, and aesthetic values without complete disruption of the socio-economic conditions associated with livestock husbandry on the public lands.

The initial and long-term livestock stocking level for Alternative D is 44,774 AUMs. This is 77 percent of the six year average licensed grazing use in the RMP area. Forage totaling 13,596 AUMs for mule deer and 721 AUMs for antelope would be available to meet 1995 Idaho Department of Fish and Game big game population projections. See Table 2-8 and Appendix A, Table 3.

The stocking level for Alternative D was arrived at after evaluating range condition and trend, livestock actual use and utilization, and wildlife demands for each allotment. Where utilization exceeded 40 percent on native range and 60 percent on seeded range, and the condition class was fair or worse with static or downward trend, forage was adjusted downward to achieve good or better range condition, improve watershed, and enhance wildlife.

Livestock would continue to utilize the allotments under present management systems or grazing management systems would be developed to enhance wildlife, watershed, and overall rangeland vegetation conditions (Appendix B). Seasons of use would be according to Appendix B. Existing range developments and land treatments would continue to be maintained in a useable condition. No new livestock land treatments would be authorized except in emergency cases such as after wildfire. New range improvements, such as fences and pipelines, would be allowed if necessary to implement allotment management plans.

TABLE 2-8

Proposed Forage Use - Alternative D

Management Area		Initial & Long Term Livestock Use Level	Mule Deer Use Level	Antelope Use Level
No.	Name	(AUMs)	(AUMs)	(AUMs)
1	Milner	98	11	- -
2	Foothills	2,964	1,745	- -
3	West Goose Creek	1,923	1,076	- -
4	Middle Mountain	5,587	1,495	- -
5	Administrative Site	- -	- -	- -
6	East Hills	279	124	- -
7	Albion	1,912	1,297	- -
8	City of Rocks	1,149	605	23
9	Raft River Valley	10,555	446	305
10	Jim Sage	4,226	2,288	127
11	Cotterel	3,308	1,027	162
12	Highway Unit	8,119	180	97
13	Sublett	4,654	3,243	8
14	Isolated Tracts	0	59	- -
Total		44,774	13,596	721

For Allotment-specific information see Appendix A.

SUB ALTERNATIVE D

Sub Alternative D, the "no livestock grazing alternative," provides the basis for comparative analysis of impacts between no livestock and various levels of livestock use. This sub alternative is identical to Alternative D except all management area objectives and required actions which relate to livestock use levels and the development of range improvements necessary for livestock management are no longer applicable as all livestock grazing on public lands would be eliminated. The overall emphasis and management direction relative to the use and development of other resources under Sub Alternative D are the same as in Alternative D. Wildlife forage needs are the same as in Table 2-8 and the resource actions identified in Table 2-7 will remain the same.

All public lands in the RMP area would be unallotted, and existing Allotment Management Plans would be cancelled. Livestock trailing permits would be issued as necessary to allow livestock movement to or from National Forest, State, and privately owned lands. BLM would provide range use supervision. Existing range developments and land treatments would be maintained only if considered beneficial for non-livestock uses such as wildlife, watershed protection, or cultural resources. Any structural developments detrimental to wildlife would be removed. Livestock operators with investments in cooperative range development projects (e.g., fencing) would be entitled to appropriate salvage rights. No new range development projects would be undertaken unless necessary for non-livestock programs.

FURTHER PLANNING

More detailed planning for specific areas or sites is required within the management areas and sub areas. A summary of the number and type of plans is shown in Table 2-9.

TABLE 2-9

Activity Management Plans

Plans	A	B	C	D	Sub D
Allotment Management Plans	6	45	45	45	0
Coordinated Resource Management Plans	0	7	7	7	0
Limited Suppression Plans	2	9	7	9	9
Recreation Area Management Plans	0	3	3	2	2
Oregon Trail Management Plans	1	1	1	1	1
Natural Area Management Plans	1	0	0	0	0
Area of Critical Environmental Concern Plans	0	0	0	1	1
Habitat Management Plans	8	1	5	7	7
Christmas Tree Management Plans	1	1	1	0	0
Watershed Management Plans	3	0	0	0	0
Floodplain Protection Plans	0	0	0	1	1
Comprehensive Multiple Use Activity Plans	1	0	0	0	0

MITIGATION

Adverse impacts resulting from the implementation of the Cassia RMP will be mitigated whenever and wherever possible, relative to the goals and objectives of the plan being implemented. Various means of mitigating impacts will be used including: avoiding the impact altogether; minimizing the impact by limiting the degree or magnitude of the action; rehabilitating or restoring the affected environment; and compensating for the impact by replacing or providing substitute resources or environments.

The Statewide Resource Management Guidelines, summarized at the beginning of this chapter, identify a minimum level of "mitigation" by establishing resource management/protection levels which apply to all alternative plans being analyzed. Additional mitigation measures will be developed on a case-by-case basis. Such mitigation may consist of standard stipulations, such as those attached to oil and gas leases; special stipulations which may be attached to various types of leases on a site-specific basis; and site-specific, project-specific mitigation identified through activity planning and/or the environmental assessment process (including factors relative to site selection, implementation methods, materials used, alternative selection, etc.). The degree, type, and extent of mitigation undertaken will depend on the site-specific conditions present and the management goals and objectives of the action (plan) being implemented.

RELATIONSHIP OF ALTERNATIVES TO ISSUES

The resource management planning process is an "issue-driven" process. Because the process is issue-driven, the alternatives evaluated in this document have been developed in response to the issues and management concerns identified in Chapter 1. How these issues/concerns have been addressed under each alternative is shown in Table 2-10.

MONITORING AND EVALUATION

The intent of monitoring and evaluation is to provide the decision maker and the public with information on the progress and results of implementing the plan. Monitoring and evaluation involves comparing the results being achieved to the objectives of the plan.

Monitoring actions are designed to assist decision makers in:

- determining whether an action is fulfilling the purpose for which it was designed;
- determining whether impact predictions are accurate;
- determining whether mitigation is working as expected;
- identifying unanticipated and/or unpredicted impacts;
- determining if planned programs and actions are resolving public issues and management concerns;

TABLE 2-10

Relationship of the Alternatives to the Issues

Planning Issue/ Management Concerns	Output or Effect to Be Measured	Present Management Alternative A	Alternative 8	Preferred Alternative Alternative C	Alternative D
RANGE MANAGEMENT					
What is the role of public lands in providing forage for competing uses such as livestock and wildlife?	AUMs of forage.	The present 6 year average use of 58,316 AUMs would be maintained for livestock. 10,168 AUMs would be proposed for deer and 166 AUMs for antelope meeting current population needs.	Initially proposes 62,150 AUMs for livestock. In the long term, increases stocking level 46% from the 6 year average to 85,268 AUMs. Deer and antelope AUMs would be the same as in Alternative A.	Initially proposes 62,150 AUMs for livestock. In the long term, increases stocking level 34% from the 6 year average to 78,108 AUMs. AUMs for deer would increase to 13,958 and antelope AUMs would increase to 720, meeting 1995 projected population needs.	Differences between Alternative D and Sub Alternative D are shown in []. Decreases forage for livestock by 23% from the 6 year average to 44,774 AUMs. Deer and antelope AUMs would be the same as Alternative C. [All livestock grazing on public land would be eliminated.]
What areas have the potential to produce additional livestock forage?	Acresage identified for land treatments.	Existing treatments would be maintained.	Treatments are planned on 117,930 acres. Projected forage increase is 23,118 AUMs. Projects creating conflicts between livestock and wildlife would be resolved favoring livestock.	Treatments are planned on 82,176 acres. Projected forage increase is 15,958 AUMs. Projects would be allowed when consistent with wildlife habitat needs.	Existing treatments would be maintained if consistent with wildlife management objectives.
How will fire be used as a vegetation management tool?	Acres of maximum or limited suppression.	Maximum - 348,083 Limited - 128,190 Prescribed burning allowed on 282,546 acres.	Maximum - 49,517 Limited - 426,756 Prescribed burning allowed on 456,283 acres.	Maximum - 173,611 Limited - 302,662 Prescribed burning allowed on 460,895 acres.	Maximum - 38,762 Limited - 437,511 Prescribed burning allowed on 360,464 acres.
How should grazing allotments be grouped according to their management potential.	# of allotments in Maintain/Improve/Custodial categories.	Allotments have not been categorized into M-I-C groups under current management.	Maintain - 21 Improve - 112 Custodial - 19	Same as Alternative B.	Same as Alternative B.
WOODLAND PRODUCTS					
How will woodland resources be managed to provide for the increasing public demand for firewood, posts and Christmas trees?	Acres of woodland habitat open to harvest (100,803 acres identified).	60,035 acres of woodland habitat (59%) is open. Projected 1990 demand would be met. Harvest of 520 pinyon Christmas trees would be allowed biennially.	All 100,803 acres of woodland habitat is open. Projected 1990 demand would be met. Harvest of 750 pinyon Christmas trees would be allowed biennially.	97,803 acres of woodland habitat (97%) is open. Projected 1990 demand would be met. Harvest of 520 pinyon Christmas trees would be allowed biennially.	22,658 acres of woodland habitat (22%) is open. Projected 1990 demand would be met. No pinyon Christmas trees would be harvested.
WILDLIFE					
How will riparian & wetland areas be managed?	Acres of wetland/riparian areas protected (189 acres identified).	187 acres of wetland/riparian habitat would receive special management attention to improve wildlife habitat.	Wetland/riparian areas would not receive special management or protection.	5.9 miles (14 acres) of Dry Creek would be managed to maintain or improve fish and wildlife habitat. Activity and project planning would emphasize management actions and mitigation to improve wetland/riparian conditions, though changes would be slight.	189 acres of wetland/riparian habitat would be managed to provide optimum fisheries and wildlife habitat, enhance water quality, and improve ecologic condition.

TABLE 2-10 (cont.)

Planning Issue/ Management Concerns	Output or Effect to Be Measured	Present Management Alternative A	Alternative B	Preferred Alternative Alternative C	Alternative D
How will the habitat of threatened, endangered, and sensitive wildlife and plant species be managed?	Species protection.	Threatened and endangered species would be protected in accordance with federal laws. Ferruginous hawk nesting habitat would be specifically protected from human disturbance. Species listed as sensitive by the State of Idaho would receive project-specific protection.	Threatened and endangered species would be protected in accordance with federal laws. Species listed as sensitive by the State of Idaho would receive no special consideration.	Threatened and endangered species would be protected in accordance with federal laws. Other species listed as sensitive by the State of Idaho would receive project-specific protection.	Same as Alternative C.
How will big game, upland game, waterfowl, and non-game habitat be managed?	Big game population numbers; acres of habitat protected.	Provide forage for the following mule deer by season of use (current population): 3,516 spring; 3,516 summer; 3,516 fall, 6,119 winter. Provide yearlong forage for 130 antelope (current population). 38% of crucial deer winter range would be protected from conflicting uses. 20% sagebrush cover would be maintained within two miles of sage grouse strutting grounds and winter areas. Seasonal closures would protect nesting sage grouse and ferruginous hawks, and deer on crucial winter range. 36 isolated tracts (3,965 acres) would be managed for upland game and non-game habitat.	Big game numbers same as A. Conflicts between livestock and wildlife would be resolved in favor of livestock. No deer winter range would be protected from conflicting land uses. 28 isolated tracts (2,925 acres) would be cooperatively farmed by private landowners to increase the production of upland game food and stimulate the agricultural economy.	Provide forage for the following mule deer by season of use (1995 population projection): 4,645 spring; 4,645 summer; 4,615 fall; 8,643 winter. Provide yearlong forage for 565 antelope (1995 population projection). All crucial deer winter range, 99% of crucial sage grouse habitat, and all ferruginous hawk habitat would be protected. 36 isolated tracts (3,965 acres) would be managed to improve wildlife habitat for upland game and non-game although other land uses could occur.	Big game numbers same as Alternative C. Conflicts between livestock and wildlife would be resolved in favor of wildlife. Improved rangeland conditions would benefit wildlife. All deer winter range, sage grouse habitat, and ferruginous hawk habitat would be protected. 36 isolated tracts (3,965 acres) would be managed to exclude competitive land uses, providing habitat for upland game and non-game species. [No conflicts between livestock and wildlife because livestock use on public lands would be eliminated.]
WATERSHED					
What are the land management objectives for critical floodplains?	Floodplains protected.	No protection of key floodplains. 4,887 acres of flood-prone watershed along Beavertown Creek would be managed to improve ecologic condition and stabilize drainage channels.	Key floodplains—2,000 acres—along Meadow, Shirley, One Mile, and Warm Creeks would be protected via restrictions on uses that would decrease plant cover and reduce channel stability.	Same as Alternative B. 4,887 acres of flood-prone watershed along Beavertown Creek would be managed to improve ecologic condition and stabilize drainage channels.	Same as Alternative C.
How will soil and water resources be managed?	Erosion rates.	Minor emphasis on water quality and soil conservation. The Foothill/Goose Creek area (18% of the EIS area) is managed for improved watershed condition. Livestock would concentrate along streams. Average sheet erosion would stabilize at 4.1 tons/acres/year.	Limited emphasis on water quality and soil conservation. Livestock numbers along streams would be increased. Range treatments would be conducted in fragile soil areas. Average sheet erosion would increase 24% from 4.1 to 5.1 tons/acre/year.	480 acres will be managed to protect springs that feed the Oakley City water supply. Average sheet erosion would decrease 7% from 4.1 to 3.8 tons/acre/year. Management actions incorporated into projects and activity plans would result in stabilized or slightly improved water quality.	Average sheet erosion would decrease 15% from 4.1 to 3.5 [46% from 4.1 to 2.2]. Riparian zones would be fenced to exclude livestock or be managed as a part of an intensive grazing system, thus lowering bacterial pollution on 12 streams. Fewer [or no] livestock would result in a decline in bacterial pollution areawide. Springs that feed the Oakley City water supply would be protected (480 acres).

WATERSHED

TABLE 2-10 (cont.)

Planning Issue/ Management Concerns	Output or Effect to Be Measured	Present Management Alternative A		Alternative B		Preferred Alternative Alternative C		Alternative D	
		Wheeled Vehicles	Oversnow Vehicles	Wheeled Vehicles	Oversnow Vehicles	Wheeled Vehicles	Oversnow Vehicles	Wheeled Vehicles	Oversnow Vehicles
<u>CULTURAL AND HISTORIC RESOURCES</u>									
How will cultural and historic resources be managed?	Acres of cultural and historic values to be protected.	3,360 acres (adjacent to 43 miles of trails) along the Oregon Trail and other pioneer routes as well as 1,628 acres at the City of Rocks would be protected and managed for historic values.	Open: 274,736 Limited: 201,357 Closed: 180	Open: 274,736 Limited: 201,357 Closed: 180	Open: 417,423 Limited: 58,850 Closed: 0	Open: 472,308 Limited: 3,965 Closed: 0	Open: 256,639 Limited: 219,154 Closed: 430	Open: 382,202 Limited: 45,197 Closed: 48,874	1,160 acres along the Oregon Trail near Raft River, trail segments on the Milner Tract, and 1,628 acres at the City of Rocks would be managed to protect historic values. 27,268 acres (West Goose Creek) would be managed to protect a significant concentration of cultural values.
<u>RECREATION</u>									
How will BLM provide for off-road vehicle (ORV) use?	Acres available for ORV use.								
Where will BLM provide for developed and dispersed recreation?	Recreation area acreage.	Dispersed motorized/non-motorized recreation is encouraged throughout the RMP area. Meeting public need for recreation by providing opportunities and facilities is identified on 161,669 acres. 160 acres are designated to accommodate winter sports activity in conjunction with snowmobile use on adjacent USFS lands. 140 acres are under R&PP lease to the city of Burley for recreational purposes. Motorcross activities occur on the 20 acre Ouncan Tract.	Open: 274,736 Limited: 201,357 Closed: 180	Open: 274,736 Limited: 201,357 Closed: 180	Open: 417,423 Limited: 58,850 Closed: 0	Open: 472,308 Limited: 3,965 Closed: 0	Open: 256,639 Limited: 219,154 Closed: 430	Open: 382,202 Limited: 45,197 Closed: 48,874	Emphasis is on providing dispersed non-motorized recreation opportunities. Hiking/horseback riding/cross-country ski trails would be developed on 65,047 acres. Upgrading existing camping/picknicking facilities would be undertaken. City of Burley R&PP leases would be continued. The 24,080 acre Jim Sage roadless area would be designated a Special Recreation Management Area.
How will areas of high quality scenery, roadless character, and unique historic, physical, or biological values be managed?	Natural Area, ACEC, Special Management Area acreages.	27,250 acres on Jim Sage Mountain would be designated a Natural Area. The 1,628 acre City of Rocks area would be managed to preserve the area in its natural state. A Goose Creek travel zone was established to preserve scenic values. Cottrell Mountain (40,967 acres) is managed as an "Open Space, Scenic Area."	Open: 274,736 Limited: 201,357 Closed: 180	Open: 274,736 Limited: 201,357 Closed: 180	Open: 417,423 Limited: 58,850 Closed: 0	Open: 472,308 Limited: 3,965 Closed: 0	Open: 256,639 Limited: 219,154 Closed: 430	Open: 382,202 Limited: 45,197 Closed: 48,874	Management of roadless areas and natural areas would not be provided for. City of Rocks (1,628 acres) would be designated a Special Recreation Management Area because of scenic, historic, and geologic values. Scenic and roadless character found on Jim Sage Mountain are recognized in the objective for non-motorized recreation on 11,227 acres. Scenic values along the Goose Creek Road (1/2 mile either side of road from Wilson Pass and to Utah border) will be preserved as will scenic quality and open space values on Cottrell Mountain.

TABLE 2-10 (cont.)

Planning Issue/ Management Concerns	Output or Effect to Be Measured	Present Management Alternative A	Alternative B	Preferred Alternative Alternative C	Alternative D
<u>LANDS AND REALTY</u>					
What lands could be disposed of or exchanged to best serve the public interest or improve public land management?	Transfer acres.	Private exchange - 5,725 General disposal - 26,830 State exchange - 1,124	Private exchange - 6,004 General disposal - 6,675 State exchange - 2,959 Forest Service Transfer - 2,042	Private exchange - 5,234 General disposal - 3,469 State exchange - 2,959 Forest Service Transfer - 2,042	General disposal - 560
What lands are available for rights-of-way to accommodate energy, utility, and public service needs?	Acres open to rights-of-way.	Open - 432,663 Closed/Restricted - 43,610	Open - 474,833 Closed - 1,440	Open - 432,323 Closed/Restricted - 43,950	Open - 409,598 Closed/Restricted - 66,695
What areas are available for sanitary landfills?	Acres open to location of sanitary landfills.	Utility lines restricted to 53 miles of designated corridors (4,240 acres). Landfills are allowed on 465,403 acres, excluded on 10,870 acres. Projected future demands would be met.	Landfills are allowed on 465,033 acres, excluded on 10,240 acres. Projected future demands would be met.	Landfills are allowed on 426,358 acres, excluded on 49,915 acres. Projected future demands would be met.	Landfills are allowed on 375,877 acres, excluded on 100,396 acres. Projected future demands would be met.
<u>MINERALS MANAGEMENT</u>					
How will energy resource development be accommodated?	Acres open to energy leasing and development.	Open - 53,359 No Occupancy - 3,093 Seasonal Closure - 410,280 Closed - 2,055	Open - 473,644 No Occupancy - 2,759 Seasonal Closure - 0 Closed - 0	Open - 217,279 No Occupancy - 5,038 Seasonal Closure - 256,360 Closed - 0	Open - 44,734 No Occupancy - 5,794 Seasonal Closure - 428,305 Closed - 0
How will development of the building stone resource be accommodated? What areas will be available for the removal of building stone?	Area open to building stone mining.	All known deposits of Oakley Stone are available for mining. 8,140 acres on Middle Mountain are protected from restrictive withdrawals that would hinder the mining of Oakley Stone.	All known deposits of Oakley Stone are available for mining. 6,800 acres on Middle Mountain are designated as an intensive management area to facilitate present mining and future development of Oakley building stone.	All known deposits of Oakley Stone are available for mining with the exception of 41 acres of wetland/riparian habitat that is closed.	All known deposits of Oakley Stone are available for mining with the exception of 41 acres of wetland/riparian habitat that is closed.
What areas will be open to the removal of sand and gravel?	Acres open to removal of sand gravel.	Open - 434,101 Closed - 42,172 Future demand would be met for the next 15 years.	Open - 473,694 Closed - 2,597 Future demand would be met for the next 15 years.	Open - 470,011 Closed - 6,262 Future demand would be met for the next 15 years.	Open - 432,839 Closed - 43,434 Future demand would be met for the next 15 years.

- ensuring that decisions are being implemented; and
- determining the need for modification or termination of an action.

The District Manager will also, on a periodic basis, review the plans and policies of other Federal agencies, State and local governments, and Indian tribes to determine if there is sufficient variation to warrant amendment or revision of the RMP.

The proposed resource monitoring plan for the Cassia RMP is shown in Appendix C. Variations in this plan may occur depending on the RMP alternative which is selected for implementation.

IMPACT SUMMARY

Based on information and analysis presented in Chapters 3 and 4, certain environmental impacts have been identified which would result from implementation of the four alternatives and one sub alternative. Table 2-11 lists these anticipated affects, both beneficial and adverse, in a comparative format. The effects are defined in relationship to the existing situation and/or anticipated future trends resulting from present management.

TABLE 2-11

Comparative Impact Summary

Element Evaluated	Alternative A	Alternative B	Alternative C	Alternative O	Sub Alternative O
SOILS/WATERSHED					
-Change in Potential Erosion Rates (% of RMP area)	Existing erosion rates would continue.	71% 2% 27%	2% 74% 24%	1% 23% 26%	0 77 23
-Potential Erosion Rates (Tons/Acre/Year)	4.1	5.1	3.8	3.5	2.2
-Water Quality	Present water quality conditions would persist. Water quality on 26.9 miles of stream (59% of identified streams) would remain unacceptable. Sedimentation problems would continue with siltation of irrigation canals and reservoirs evident. Sedimentation would inhibit aquatic habitat.	Increased exploitation of vegetative and mineral resources would result in unacceptable water quality on 35.6 miles of streams (78% of identified streams). Sedimentation problems would increase due to land treatments, increased livestock use, unrestricted ORV use, and increased mineral activities. Ground water quality could be adversely affected by mineral activities. Sedimentation would severely inhibit aquatic habitat and other downstream uses.	Water quality impacts would be mixed. Though short-term deterioration from land treatments would occur, long-term increased vegetative cover and more stable soils would improve conditions in perennial stream watersheds. Management plans developed pursuant to this plan would include management practices favorable to and mitigation of impacts on perennial streams. Unacceptable water quality would continue on only 14.7 of the 45.5 miles of streams (32% of the total).	Water quality would improve significantly with unacceptable quality conditions on only 12.4 of the 45.5 stream miles (27% of the total). Sediment loads would decline because of a 12% areawide decrease in soil erosion.	This option provides the highest water quality of all alternatives. Unacceptable water quality conditions would occur on only 9 of the areas 45.5 stream miles (20% of the total). No livestock use would result in a dramatic drop in late summer coliform bacteria counts. Sediment loads in streams would be lower because of the 46% areawide decrease in soil erosion.
-Domestic Water Sources	No protection of the springs supplying water to the City of Oakley. Periodic bacterial contamination would continue.	Same as Alternative A.	Springs supplying the City of Oakley would be protected. Bacterial contamination would be unlikely.	Same as Alternative C.	Same as Alternative C.
-Water Yield and Flooding	Water yields would continue to increase due to insufficient vegetative cover. Flood intensity and frequency would increase. Flooding along four critical floodplains (Warm, Shirley, Meadow and One Mile Creeks) would persist.	Increased runoff and flood potential would result from large scale land treatments. Increased livestock grazing (+46%), expanded mineral and energy development, and unrestricted motorized vehicle use. Flooding along four critical floodplains (Warm, Shirley, Meadow and One Mile Creeks) would be partially curtailed or eliminated through structural means and improved plant cover.	Critical watershed in poor condition would be protected or rehabed to encourage infiltration of precipitation. There would be an increase in low quality water yield from 82,176 acres of land treatment. Floods would decrease in frequency. Flooding along four critical floodplains would be decreased through channel structure and improved plant cover.	Flood frequency would be reduced areawide because of increased vegetative cover and litter (watershed cover). Improved cover would enhance soil permeability thereby reducing runoff that leads to flooding. Long-term surface water yield would decline and would be less silt laden than present runoff. Aquifer recharge would increase.	Similar to Alternative O, but due to the absence of livestock grazing, soil cover would accumulate much more rapidly, improving soil permeability, and decreasing runoff and flood occurrences.
-Riparian Areas	Long-term downward trend would continue on 75% of the wetland/riparian areas currently in poor or fair condition. The 25% in good and excellent condition would remain static.	The 46% increase in livestock would adversely affect all 189 acres of wetland/riparian vegetation. A decline in condition of at least one class is expected. Unrestricted ORV use, mineral development, and wood land harvest would also affect riparian condition, but impacts would be more site specific.	Though uses may increase as a result of this alternative, site-specific activity plans would include management actions and mitigation to protect significant wetland/riparian resources. Conditions would be expected to stabilize or show slight long-term improvement.	Management is toward better wetland/riparian conditions. If the 23% reduction in livestock stocking level does not result in improved conditions, then changes in livestock management and structural means would be initiated. A slow, long-term improvement in condition is expected.	No livestock grazing would result in overall improvement in all riparian areas. Present degraded stream banks would gradually stabilize. Sediment and water quality problems associated with livestock use along streams would be eliminated.
VEGETATION					
-Trend (Acreage/%)					
Upward	77,731/16	327,395/70	309,242/66	241,082/51	413,515/88
Static	275,275/59	123,783/26	139,997/30	199,232/43	49,910/11
Downward	116,287/25	18,115/4	20,054/4	28,979/6	5,868/1
-Condition (Acreage/%)					
Excellent	43,299/9	130,137/28	131,686/28	194,019/41	172,458/37
Good	99,735/21	209,739/45	183,168/39	110,344/24	128,124/27
Fair	175,103/37	77,515/16	89,621/19	105,585/22	75,682/16
Poor	151,156/33	51,902/11	64,818/14	59,345/13	93,029/20
-Cover	32%	33%	33%	33%	34%

TABLE 2-11 (cont.)

Element Evaluated	Alternative A	Alternative B	Alternative C	Alternative D	Sub Alternative D
WOODLAND PRODUCTS -Firewood and Posts	60,035 acres open (60% of woodland habitat). 3,056 cords available per year. Projected demand would be met.	All woodland habitat (100,803 acres) open. 5,132 cords available per year. 27,334 acres (27%) would be treated to increase grass production for livestock, lowering harvest to 3,740 cords per year. Demand would be met.	97,803 acres open (97% of woodland habitat). 5,132 cords available per year. 27,334 acres (7%) would be treated, lowering harvest to 3,740 cords per year. Demand would be met.	22,658 acres open (22% of woodland habitat). 1,153 cords available per year. Projected demand would be met.	Same as Alternative 0.
-Pinyon Christmas Trees	1,015 acres open for biennial harvest of 520 trees. Sustained-yield management. Harvest does not meet all public demands.	1,440 acres (maximum acreage suitable for harvesting pinyon pine) open for biennial harvest of 750 trees. Sustained-yield management. Harvest does not meet all public demand.	1,015 acres open for biennial harvest of 520 trees. Sustained-yield management. Harvest does not meet all public demand.	All suitable acreage is closed to preserve the pinyon pine resource. None of the public demand for pinyon Christmas trees would be met.	Same as Alternative 0.
WILDLIFE -Antelope	All yearlong antelope range would be open to energy leasing and could be adversely affected if development occurs. Forage would be assigned to meet only current populations needs (166 AUMS).	All yearlong habitat could be adversely affected by energy development. 25% of antelope range lies within proposed land treatments. Forage would be assigned to meet only current population needs (166 AUMS).	Antelope habitat not protected from energy development. 18% of the antelope range lies within proposed land treatments. Forage would be assigned to meet 1995 population projections (721 AUMS).	Antelope habitat not protected from energy development. Yearlong habitat would be maintained or improved. Forage would be assigned to meet 1995 population projections (721 AUMS).	Same as Alternative 0.
-Mule Deer	74% of the crucial deer winter range would be grazed between 10/1 and 2/28. Crucial deer winter range is closed to ORV use 12/1 to 4/30. Some impacts may occur during spring fawning. Removal of woodland understory vegetation, but would reduce thermal and hiding cover in migration areas. Forage would be assigned to meet only current population needs (9,918 AUMS).	No protection of deer winter range from energy development. 73% of the crucial deer winter range would be grazed between 10/1 and 2/28 by a 46% increase in numbers of livestock. 35% of deer winter range lies within proposed land treatments. Though use is limited, unrestricted ORV activity in the RMP area would adversely affect mule deer during the winter. Harvest of woodland products would have the same impacts as under A. Forage would be assigned to meet only current population needs (9,198 AUMS).	Impacts would be mixed. Crucial deer winter range closed to energy development 12/1 to 3/31. Food and cover (carrying capacity) would increase on the 17% of deer winter range that would be treated to improve forage for deer and cattle. Additional forage resulting from land treatments would help reduce competition between mule deer and livestock on deer winter range. Though much of the area would be open to over snow vehicles, use would be limited due to snow conditions. No woodland harvest allowed in deer migration routes. Forage would be assigned to provide for projected 1995 mule deer populations (13,596 AUMS).	All deer winter range would be maintained or improved. Other resource uses are closed, seasonally closed, or otherwise limited to protect mule deer habitat. Forage competition between livestock and deer on crucial deer winter range would be reduced or eliminated because of an 17% reduction in livestock use in the fall-winter period. Forage would be assigned to provide for projected 1995 mule deer populations (13,596 AUMS).	Same as Alternative 0. Forage competition on deer winter range would be eliminated.
-Upland Game	All sage grouse winter and nesting areas are closed 12/1 to 5/31 to energy development providing less stress during critical periods. Nest destruction and trampling by livestock would continue at current levels. Livestock utilization of forbs on spring and summer ranges would have an adverse affect on sage grouse habitat and populations. Juvenile birds particularly. 58% of the area is open to unrestricted ORV use. All transfer acreage (33,579 acres) is in upland game habitat. 6% of sage grouse habitat would be transferred out of public ownership. Spring harvest of woodland products would adversely affect nesting sage grouse or upland game.	Cover, nesting, and brood-rearing habitat would not be adequately protected. 35% of present sage grouse habitat converted to grassland to increase livestock forage production. Food and cover on this acreage would be lost. A 46% increase in livestock use would cause increased trampling, nest desertion, and loss of succulent forbs in sage grouse brood-rearing areas. 3% of sage grouse habitat would be lost via transfer of public land to private ownership. With 88% of area open to wheeled ORVs, nest destruction or abandonment would increase. Increased grazing pressure on wetland/riparian areas would further restrict the production of food/cover for upland game.	Impacts to upland game would be mixed. Land treatments would improve 24% of sage grouse habitat by increasing forb production and habitat diversity. Tall, dense sagebrush unsuitable for grouse would be converted to more suitable habitat. Sage grouse and other ground nesting birds would be more susceptible to nest desertion and trampling as a result of the long-term 34% increase in grazing. 3% of sage grouse habitat would be lost via the transfer of public land to private ownership. Riparian areas would continue to produce food and cover for upland game at a level well below optimum.	Significant benefit for all upland game species. Populations would increase as a result of improved nesting and brood-rearing cover due to the 23% reduction in livestock use. Seasonal ORV closures would benefit sage grouse during the strutting and nesting season.	Upland game populations would increase due to healthy riparian habitat and improved nesting/brood-rearing cover. Physical disturbance from livestock would cease. Seasonal ORV restrictions would protect sage grouse during the strutting-nesting season. However, over the long term (10+ years) the impact of no grazing would be adverse, resulting in vegetation that is too dense for optimum sage grouse nesting.

TABLE 2-11 (cont.)

Element Evaluated	Alternative A	Alternative B	Alternative C	Alternative D	Sub Alternative D
-Threatened, Endangered, and Sensitive	Threatened and endangered species protected via statewide guidelines and mitigation at project planning stage. Ferruginous hawks would be protected from human disturbance during nesting.	Threatened and endangered species protected via statewide guidelines at project planning stage. 46% increase in grazing and treatment of an additional 117,930 acres of native vegetation would reduce food, cover, and general habitat for many sensitive species. Long-billed curlew and burrowing owl habitat would improve, but their prey base would decline (ferruginous hawk prey base as well). Unrestricted mineral leasing, ORV use, and wood cutting would adversely affect sensitive species, particularly during spring nesting period.	Threatened and endangered species protected via statewide guidelines and mitigation at project specific planning stage. The 34% increase in livestock use and the treatment of an additional 82,176 acres would have an adverse affect, particular on the prey base for ferruginous hawk, long-billed curlew, and burrowing owl. The more open grass type resulting from vegetative conversions would be beneficial to curlew and burrowing owl.	Threatened and endangered species protected via statewide guidelines. A 23% reduction in livestock use would benefit sensitive species. Prey base would increase resulting in an increase in raptors. Less impact on ground nesting species such as the curlew. Open areas for long-billed curlew and burrowing owls would be available. More restrictions on other activities would also be beneficial.	Impacts mixed. Threatened and endangered species protected via statewide guidelines. No grazing would increase food and cover for rodents, the primary prey base of the ferruginous hawk. Curlew and burrowing owl would decline due to dense, unsuitable nesting habitat resulting from the lack of livestock grazing.
-Aquatic Wildlife Stream Condition Class (% of stream miles)					
Excellent	30	0	30	58	74
Good	58	30	58	12	26
Fair	12	70	12	0	0
Poor	0	0	0	30	0
Fisheries Potential (% of stream miles)					
Excellent	30	0	30	58	54
Good	58	30	58	12	12
Fair	12	70	12	0	0
Poor	0	0	0	30	34
LIVESTOCK MANAGEMENT	Initial and long-term stocking would maintain livestock grazing at the current 6 year average use level (58,316 AUMs). No new range improvements or land treatments would be undertaken. Seasons of use would not change. There would be little opportunity to improve grazing management. 33,199 acres within allotments would be transferred out of BLM control with a potential loss of up to 3,741 AUMs.	Initial stocking rate for livestock of 62,150 (+7%) and a long-term stocking level goal of 85,268 AUMs (+46%). Land treatments are proposed on 117,930 acres with a resultant AUM increase of 23,118. One AUM of this increase would be lost because 10 acres in Sub Area 12a could not be treated. No range improvements would be allowed in this Sub Area, either. Approximately 3% of the area would be adversely affected by earlier or seasonal changes in grazing, while 19% of the area would benefit from later turnout (improved plant vigor and health). 15,308 acres within allotments would be transferred out of BLM control with a potential loss of up to 1,588 AUMs.	Initial stocking rate for livestock of 62,150 AUMs (+7%) and a long-term stocking level goal of 78,108 AUMs (+34%). Land treatments are proposed on 82,197 acres with a resultant AUM increase of 15,958. Seventeen AUMs of this would be lost because 55 acres in Sub Area 8b and 10 acres in Sub Area 12a could not be treated. No range improvements would be allowed in Sub Area 12a. Season of use changes would have the same affects as in 8. 12,115 acres within allotments would be transferred out of BLM control with a potential loss of up to 1,284 AUMs.	Initial and long-term stocking level goals of 44,774 AUMs (-23%). Livestock grazing would be excluded from Area 14 (109 AUMs not assigned). No land treatment would be undertaken. Improvements would be allowed when necessary to implement grazing system, with the exception of Sub Area 12a. Seasons of use changes would be the same as in 8. 560 acre within allotments would be transferred out of BLM control with a loss of 10 AUMs.	No livestock grazing would occur under this Sub Alternative.

TABLE 2-11 (cont.)

Element Evaluated	Alternative A	Alternative B	Alternative C	Alternative D
RECREATION - Recreation Visitor Days Projected to 2000 Hunting 24,096 Off-Road Vehicle Use 41,200 Other Dispersed Activities 262,500 ORV Use Wheeled 58 Open 42 Limited Closed 41 Over Snow 53 Open 32 Limited Closed 15	Current management projections. - 6,696 +10,800 + 2,500	+4,284 +5,800 +7,500	+7,558 - 6,000 + 2,500	+10,167 - 6,000 + 2,500
Current Management: 87% (+29%) 13% (-29%) 0 (-<1%) 99% (+46%) 1% (-31%) 0 (-15%)	54% (-4%) 46% (-4%) <1% (0) 80% (+27%) 10% (-22%) 10% (-57%)	8% (-50%) 87% (+45%) 5% (+5%) 9% (-44%) 38% (+6%) 53% (+38%)	9% (-2%) 0 (-<1%) 90% (+27%) 1% (+<1%) 92% (-7%) 8% (+7%) 91% (0) 9% (0) 92% (-7%) 8% (+7%)	8% (-50%) 87% (+45%) 5% (+5%) 9% (-44%) 38% (+6%) 53% (+38%)
VISUAL RESOURCES Contains land use direction that provides protection of scenic values. With 20% of RMP area already treated and another 25% proposed for treatment (vegetative conversion), a cumulative adverse affect on visual quality would occur. The same would be true should energy or mineral development occur on 99% of the area that is open to leasing. The areas one outstanding scenic area, City of Rocks, would not be protected. Site specific visual concerns would be considered in project lay-out and design.	Does not adequately consider protection or management of scenic values. With 20% of RMP area already treated and another 25% proposed for treatment (vegetative conversion), a cumulative adverse affect on visual quality would occur. The same would be true should energy or mineral development occur on 99% of the area that is open to leasing. The areas one outstanding scenic area, City of Rocks, would not be protected. Site specific visual concerns would be considered in project lay-out and design.	Impacts on visual resources are mixed. With 20% of RMP area already treated and another 17% proposed for treatment, a cumulative adverse affect on visual quality would occur. With most of area open for energy and mineral development, the potential exists for cumulative impacts on visual resources. Scenic values in the City of Rocks would be protected via a Special Recreation Management Area designation. Site specific visual concerns would be considered in project lay-out and design.	Favors protection of visual resources. Designates the City of Rocks as an area of critical environmental concern thus protecting the area's outstanding scenic quality. Open space and scenic values would be preserved on Jim Sage Mountain and on Cottonwood Mountain. No land treatments coupled with the 23% reduction in livestock grazing would benefit scenic quality throughout the area. Site specific concerns would be considered in project lay-out and design.	Impacts would be similar to Alternative D. No livestock grazing would result in improvement in vegetation condition resulting in the restoration of a more natural landscape.
CULTURAL RESOURCES Downward trend in condition of both known and unidentified sites would continue. Impacts from surface erosion, cattle trampling, ORV use, and artifact collection would continue at present rates.	Impacts from livestock trampling would increase substantially. Trampling impacts on 81 identified sites (88% of known sites) would increase due to an average 66% increase in grazing. Unidentified sites would be affected by the 46% increase in grazing. A 25% increase in erosion would result in increased surface modification and horizontal displacement of artifacts. Projected increases in erosion average 34% on 20 allotments with 64% of known sites. If increased use results from the increase in acreage open to ORV use, additional adverse impacts to cultural sites would occur.	Impacts from livestock trampling would increase, but not to the extent of Alternative B. Unidentified sites would be affected by the 34% increase in grazing. 79 f identified sites (85%) are in allotments scheduled for a 49% increase in livestock use. An overall decrease in erosion of 7% is projected. Surface erosion would decrease or remain stable on all known sites. A slight reduction in the acreage open to unrestricted ORV use would result in a minor decrease in impacts on cultural sites from this activity.	Impacts would be less than at present. A 23% overall reduction in grazing would be taken under this alternative. A 20% reduction in livestock use on allotments containing 73 sites would result in less trampling impacts, while no change in use would occur on the remaining 21 sites. A 25% decrease in erosion is projected under this alternative, while only about 9% of the land acreage is open to unrestricted ORV use. These factors would lead to reduced impacts on cultural resources.	With grazing eliminated, breakage and displacement of artifacts resulting from livestock activity would decrease by 100%. With an araidwide 46% decrease in erosion, impacts to unidentified sites would decrease significantly. ORV restrictions would benefit cultural sites.
MINERALS -Energy Resources Open 11% Closed <1% Seasonal Closure 88% No Surface Occupancy <1% -Leasable Minerals Open 99% Closed 1% -Saleable Minerals Open 91% Closed 9% -Locatable Minerals Open 99% Closed 1%	Current Management: 99% (+88%) 0 (-<1%) 0 (-88%) <1% (0) 100% (+<1%) <1% (-<1%) 99 (+8%) <1% (-8%) 100% (+1%) 0 (-1%)	28% (+17%) 0 (-<1%) 71% (-17%) 1% (+<1%) 99% (+<1%) <1% (-<1%) 99% (+8%) 1% (-8%) 99% (+1%) 0 (-1%)	9% (-2%) 0 (-<1%) 90% (+27%) 1% (+<1%) 92% (-7%) 8% (+7%) 91% (0) 9% (0) 92% (-7%) 8% (+7%)	9% (-2%) 0 (-<1%) 90% (+27%) 1% (+<1%) 92% (-7%) 8% (+7%) 91% (0) 9% (0) 92% (-7%) 8% (+7%)
Location of mining claims and extraction of Oakley Stone is allowed on Middle Mountain.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.

TABLE 2-11 (cont.)

Element Evaluated	Alternative A	Alternative B	Alternative C	Alternative D	Sub Alternative D
LANDS AND REALTY					
-Transfer Areas	Public issues regarding transfer of public lands to private ownership would generally be met.	Same as Alternative A.	Same as Alternative A.	Public issues would not be addressed relative to land transfer, though the issue of retaining all lands with grazing potential is.	Same as Alternative D.
-Rights-of-Way	R/Ws excluded on less than 1% of public land. Major pipelines and powerlines restricted to 51 miles of corridor. Present and projected demand would be met.	More than 99% of the area is open to location of rights-of-way. Present and projected demand would be met.	91% of the area open to location of rights-of-way. Present and projected demand would be met.	86% of the area open to location of rights-of-way. Present and projected demand would be met.	Same as Alternative D.
-Sanitary Landfills	Demand for land fill sites would be met. Only 2% of areas is closed to landfills.	Same as Alternative A.	Same as Alternative A except 10% of area closed.	Same as Alternative A except 33% of area closed.	Same as Alternative D.
ECONOMICS					
-Net Present Worth	\$27,551,115	\$26,774,980 (-3%)	\$30,356,273 (+10%)	\$35,389,403 (+28%)	\$32,730,560 (+19%)
-Benefit/Cost Ratio	3.75	3.58	3.99	4.66	4.93
-Direct Income Change Short Term	+\$49,725	+\$287,102	+\$299,672	-\$738,537	-\$3,418,442
-Long Term	+\$171,370	+\$1,665,565	+\$1,327,599	-\$579,514	-\$3,244,534
-Secondary Income Changes Short Term	+\$48,684	+\$101,469	+\$117,776	-\$135,638	-\$802,170
-Long Term	+\$206,494	+\$538,925	+\$538,662	+\$74,200	-\$576,559
-Employment Changes Short Term	+7	+20	+22	-34	-182
-Long Term	+33	+110	+105	0	-144
-Rancher Income Changes Short Term	\$ 0	+\$ 150	+\$ 150	-\$ 500	-\$2,150
-Group 1	0	+\$ 375	+\$ 375	-\$ 1,250	-\$5,425
-2	0	+\$ 1,250	+\$ 1,250	-\$ 4,175	-\$17,800
-3	0	+\$ 1,300	+\$ 1,300	-\$ 4,300	-\$18,675
-4	0	+\$ 7,000	+\$ 7,000	-\$23,000	-\$100,000
-5	0	+\$ 3,275	+\$ 3,275	-\$10,750	-\$46,650
-6	0	+\$ 950	+\$ 700	-\$ 500	-\$2,150
-Long Term	0	+\$ 1,725	+\$ 1,725	-\$ 1,250	-\$5,425
-Group 1	0	+\$ 2,400	+\$ 5,700	-\$ 4,175	-\$17,800
-2	0	+\$ 7,825	+\$ 5,975	-\$ 4,300	-\$18,675
-3	0	+\$ 8,225	+\$32,000	-\$23,000	-\$100,000
-4	0	+\$44,000	+\$14,925	-\$10,750	-\$46,650
-5	0	+\$20,525			
-6	0				
SOCIAL CONDITIONS					
	No measureable affect on social systems of the area.	No measureable affect on social systems of the area.	No measureable affect on social systems of the area.	Up to 85 ranchers (out of 147) may seek outside employment, consider ranch consolidation, or sell their ranch in order to cover cash costs.	Same as Alternative D except 142 ranchers would be affected.

CHAPTER 3

AFFECTED ENVIRONMENT

The Cassia RMP area lies within two physiographic provinces. Characterized by block-faulted mountains separated by open valleys, the area east of Goose Creek and south of the Snake River Plain lies within the Great Basin and Range Province. The northern portion of the RMP area lies on a section of the Snake River Plain. Essentially flat, the plain is a youthful lava plateau, partially covered with a thin wind-blown soil layer and is almost featureless. The Owyhee Uplands extend into the southwestern portion of the RMP area. This area is a high plateau with several mountain masses, such as the South Hills, rising 3,000 to 4,000 feet above the plateau. The latter two areas are part of the Columbia Intermontane Province. Irrigated and dryland agriculture is common over much of the Snake River Plain and in the valley areas, while grazing is the predominant use in the mountainous areas and other areas not suited to agricultural development. Elevations in the area range from 4,100 feet along the Snake River to over 8,000 feet on the highest mountain peaks on public land.

Sagebrush dominates the vegetation of the lower elevations with shadscale, greasewood, cheatgrass, native perennial grasses, and rabbitbrush found in significant quantities. Cottonwood, willow, and rose are found along with other species in the wetland/riparian zones along the Snake River, other perennial and ephemeral streams, and around numerous springs. Juniper is the common canopy species found on some 100,000 acres of identified woodland habitat. Pinyon pine, Douglas fir, and aspen are found in scattered areas of open forest. Wheatgrass seedings totaling over 94,000 acres are found throughout the RMP area.

Climatic patterns in the RMP area are dominated primarily by maritime air masses originating over the Pacific Ocean. A continental climate prevails with temperatures ranging from an average high of 87°F in July to an average minimum of 14°F in January. Annual precipitation ranges from 8 inches in the lower valleys to over 25 inches on the higher mountains where 50 percent or more of the precipitation may fall as snow.

Total population within the RMP area is approximately 19,500 (1980 census). The largest city in the RMP area is Burley with a population of 8,761. Oakley, with a population of 663, is the next largest community. Declo, Malta, and Albion are in the 200-300 population range. Approximately 50 percent of the population is identified as being non-urban, living outside the incorporated towns in the RMP area.

SOILS AND WATERSHED

Soils

Because of the broad range in elevations, rainfall, and temperatures, the Cassia RMP area has many diverse and complex soil patterns (Map 3-1). Each soil series in the area was formed as a result of different dominating and diverse forces that are reflected in soil properties such as texture, drainage, degree of development, permeability and infiltration rates. Soil properties and slope, in turn, affect erodibility and soil productivity. For instance, soils in the Goose Creek Valley formed in water deposited materials and in some sections, volcanic ash. The soils on the Snake River Plain formed in wind-laid and water deposited materials over lava flows. The mountain soils in the RMP area, including the Jim Sage, Albion, Cotterel, and Middle Mountain ranges, are generally moderately deep and shallow over limestone, quartzite and lava. The soils found on the steeper mountain slopes have formed in volcanic ash, having higher erosion potential than those found along the more level Snake River Plain. Shallow soils, or those with poor or excessive drainage, can limit the types and quantities of vegetative cover at a given location thereby affecting erodibility.

A third order soil survey, which meets the National Cooperative Soil Survey standards, was conducted in the RMP area by the Soil Conservation Service. This information is available at the Burley District Office. The soil survey was used for evaluating land use potentials, helping establish potential natural plant communities, establishing initial livestock grazing rates, and predicting erosional responses.

When analyzing the effects of livestock grazing and other land uses on soils, three major soil parameters are affected: soil compaction, soil erosion and soil productivity. Some soils in the RMP area have already been affected by past use. Intense grazing practices have affected density and decreased pore space, thereby increasing soil compaction and decreasing infiltration rates. Decreased infiltration rates result in increased runoff, which increases the potential for soil erosion. Rauzi and Hanson (1966) found that infiltration rates and runoff are affected significantly by the intensity of grazing. Packer (1961) indicated that cattle trampling significantly increases soil erosion through increased soil compaction and runoff.

Depleted plant cover and trampled soils are two main factors that contribute to soil erosion of range lands. (Meehan and Platts 1978) Soil erosion affects the area being eroded as well as the waters receiving the eroded material. Erosion of the nutrient rich topsoil, where most of the organic materials is found, reduces site fertility. Sediment, the product of erosion, adversely affects water quality, fish habitat, and fills reservoirs.

Areas of heavy livestock use presently occur around existing water troughs, riparian areas, salt licks, valley flats, and shady areas. These areas have been heavily grazed, highly compacted and moderately eroded, which has resulted in soils with lower productivity. These areas of decreased vegetation and litter cover are also more susceptible to erosion and increased runoff.

Areas that currently have some severe accelerated erosion problems and areas that could develop problems because of potentially high eroding soil types are shown on Map 3-2. The soil survey indicates that 36,885 acres containing 8 percent of the public land in the RMP area have soils with high present or potential erosion.

Soil erosion is the process of soil particle detachment and subsequent removal. Productivity of the eroded site and related quality of the drainage waters may be adversely affected by soil erosion. Erosion rates, as calculated in Appendix D, are a function of many factors, predominantly the slope steepness and length, amount of cover, rainfall intensity, and soil erodibility (Factor K). Appendix D shows the maximum potential soil loss in tons/acre/year that has been estimated for each allotment, using the Universal Soil Loss Equation (USLE). These are general estimates and do not indicate absolute values, since no actual measurements have been made. It is also important to note that the USLE calculates long term average rainstorm caused erosion and will not necessarily reflect erosion caused by snowmelt runoff. Spring runoff may contribute significantly to the amount of soil erosion, especially at higher elevations in the RMP area.

Water Quality

Water quality standards are dictated by the use for which the water is intended. In Cassia County surface water is used primarily for crop irrigation with secondary uses for fishery production, recreation, wildlife, and livestock consumption. Several springs surfacing on public land in Management Area 4 supply domestic water to ranches and the City of Oakley. These are the uses that could be impacted by this land use plan. Present water quality conditions are illustrated in the Water Resources Impacts Table 4-2.

Area streams generally start the year with fair to good quality conditions only to deteriorate through the summer. The present water regime consists of high spring flows which flush the system and carry relatively high suspended sediment loads. This is typically followed by periods of minimal stream flow from mid-summer into fall when aquatic conditions approach and often exceed state quality standards for bacteria, dissolved solids, and temperature and oxygen parameters for cold water biota.

Unacceptable bacteria concentrations have appeared in the Oakley domestic water system in recent years. This problem may originate at the spring source located on public land.

Floodplains and Water Yield

Public lands in Cassia County are susceptible to two types of flooding. The first is periodic spring flooding along four lowland tributaries of the Raft River, One Mile, Shirley, Meadow, and Warm Creek and in the Beaverdam Creek

watershed of the Goose Creek drainage. The problem experienced in these watersheds typically arises with a warm, late winter rain on snowpack, resulting in high runoff and flooded low lands. These floods are directly related to snowpack and frozen soil, having no relation to watershed condition, therefore offering no management opportunities other than channel structures to route or store flood waters and warnings to people planning to build in these flood prone areas. Both flood prone drainages are influenced by public land, but most of the flood waters originate on Forest Service and private lands before reaching BLM lands and the lower flood prone private lands.

The second type flooding characteristic to the RMP area is high runoff generated from intense, scattered summer thunderstorms. This type of flooding has occurred in the area in recent years causing resource and property damage. Flash floods are directly related to storm duration and intensity, watershed size and soil cover, with soil cover providing the only manageable characteristic of the problem. Abundant organic soil cover (60 percent minimum) encourages water absorption by slowing overland flow and increasing permeability. Range condition and trend data from mountainous terrain in Management Areas 2, 3, 4, 7, 8, 9, 10, 11, and 13 generally illustrates the vegetative situation in areas with flash flood potential. Average range condition for the concerned areas shows 46 percent in fair and 29 percent in poor condition. When combined with trend averages of 65 percent static and 21 percent downward, it is evident that watershed conditions are less than desirable and getting better or remaining good only in isolated cases.

In light of the proceeding information, it is presumed that water yields are currently significantly higher than historical water yields, especially runoff from summer storms, and that snowmelt floods are inevitable, with few control techniques other than channel control structures. Management Areas 2, 3, 4, 7, 8, 9, 10, 11, and 13 have the greatest probability of exhibiting flash flooding. Although estimates cannot be more specific because of the unpredictable nature of flooding, general watershed impact from proposed management alternatives can be assessed in terms of altered water yields, and flooding probabilities and trends.

Riparian Areas

A 1981/1982 riparian and wetland inventory revealed that public lands in Cassia County had 189 acres of this valuable resource with only 25 percent rated in good or excellent condition. The remaining 75 percent was of lesser quality, well below potential. Present conditions and anticipated impacts to riparian areas are illustrated in Water Resource Impacts Table 4-2. The condition rating considered key factors such as, soil stability, vegetative vigor and diversity, wildlife habitat, and stream conditions. The inventory exemplifies the generally degenerated condition of these limited areas.

VEGETATION

Vegetation Types

The Cassia RMP area has sixteen major vegetation types. Each vegetation type is based on differences in the proportions and kinds of plant species that

predominate in a specified location. Determination of vegetation types in the Cassia RMP area was derived from a vegetation type inventory conducted in 1980 and 1981. Appendix E lists the acreage of vegetation type by allotment, Appendix F indicates the plant species commonly found in each type, while Map 3-3 shows the location of each vegetation type in the RMP area.

Riparian and Wetland Habitat

Riparian/wetland areas constitute the most environmentally sensitive vegetation type in the RMP area, containing a greater diversity of flora than any other vegetation type. There are only 189 acres of this vegetation type, less than one percent of the area. Riparian habitat refers to areas adjacent to rivers and streams and other bodies of water, such as lakes with stable water levels. Wetland habitat refers to flooded areas where the water table is at, near, or above the soil surface for extended periods of time. Marshes, swamps and wet meadows are examples of wetlands. Any source of water is a congregation point for livestock. Because of this, livestock have had a pronounced adverse effect on much of the wetland/riparian zones through heavy utilization of vegetation, trampling of wet soil, and bacterial contamination of the water source. Table 3-1 shows the acres and percent of riparian and wetland habitat in each condition class.

TABLE 3-1

Riparian/Wetland Condition Rating

Type	Excellent	Good	Fair	Poor	Total
Riparian Habitat (acres)	16	27	124	11	178
%	9	15	70	6	100%
Wetland Habitat (acres)	3	2	6	0	11
%	<u>27</u>	<u>18</u>	<u>55</u>	<u>0</u>	<u>100%</u>
Total (acres)	19	29	130	11	189
% of Total	10	15	69	6	100%

Threatened or Endangered Plants

During the summer of 1980, the Cassia RMP area was inventoried for threatened or endangered plant species. Of the plants currently under review, only one plant, Erigeron latus, was encountered in the northern portion of Management Area 4 during a study conducted by Professional Analysts of Eugene, Oregon. Restricting all surface disturbing activities in compliance with the above inventory recommendations and Idaho Statewide Resource Management Guidelines and federal law, will provide the measures to protect Erigeron latus in its known habitat. The results of the Cassia RMP area T & E inventory are on file in the Burley District Office library.

Condition

Ecological condition describes the existing vegetation composition of an area in relation to the climax (natural potential) plant community. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble the climax community.

The condition rating for a seeding describes current species composition of a seeding in relation to the composition of the plants seeded. Any rating of seeding condition takes into account the amount of reinvading species.

Condition data for the RMP area was collected as part of a 1980-81 vegetation inventory.

Appendix G shows condition ratings by allotment. A visual display of condition can be seen on Map 3-4. Table 4-4, Alternative A, presents existing condition ratings by Management Area.

Trend

Range trend refers to changes in vegetation and soil characteristics resulting directly from climatic and other natural factors and from grazing intensity.

Two techniques, plot trend and apparent trend data were collected as part of a 1980-81 vegetation inventory. All data available for an allotment was evaluated before assigning a trend rating to it. Appendix H shows trend ratings by allotment. Table 4-5, Alternative A presents trend on a Management Area basis. A visual display of trend can be seen on Map 3-5.

Cover

Vegetative cover is the combined mulch and aerial parts of plants. Cover plays an important part in a plant's ability to produce forage and provide protection to the soil. The amount of cover greatly affects infiltration rates. As plant cover is lost, infiltration decreases and runoff in turn increases, thereby reducing the effectiveness of precipitation. Therefore, the percentage of ground protected by vegetative cover can have a pronounced effect on the useability of precipitation resulting in increased forage production. At present, vegetative cover throughout the RMP area averages 32 percent. Table 4-3, Alternative A displays present cover by Management Area. Appendix I displays cover on an allotment basis.

WOODLAND RESOURCES

Map 3-6 shows the 100,803 acres of woodland in the RMP area. The woodland resource consists primarily of juniper, with minor stands of pinyon pine and aspen. Juniper is concentrated in Management Areas 3, 4, 8, 10, and 11. The main concentration of pinyon pine is in Management Area 8 near the City of Rocks with a secondary concentration on the southern end of Jim Sage Mountain. Aspen are scattered in pockets throughout the planning area but the largest concentrations are in Management Areas 4 and 13, Middle Mountain and Sublett.

The woodlands are currently producing more than an adequate supply of firewood and posts to meet present public demand from BLM lands. During 1981, woodland

stands in the RMP area supplied 54,100 board feet or 108 cords of wood. Analysis of past wood sales for the area indicates BLM supplied approximately 60 percent more woodland products in 1981 than in 1974. Under the present land use plan 59 percent of the woodland resource is available for harvest of firewood and posts. Cutting via permit is presently directed to four areas--Trapper Creek north to Mackey Canyon, east of Goose Creek, South Jim Sage and South Cotterel (Management Areas 3, 4, 10, 11).

Due to public demand BLM began reselling pinyon Christmas trees from the City of Rocks area in 1982. The present sustained-yield harvest plan provides 520 Christmas trees on a biennial basis.

WILDLIFE

Big Game

Rocky mountain mule deer are the most abundant big game species in the RMP area. They range in elevation on the public lands from about 4,200 feet along Lake Walcott to about 8,048 feet on Jim Sage Mountain. Most of the summer use is on higher elevations of the Sawtooth National Forest. Principal summer use on public land occurs on Middle Mountain, along the foothills adjacent to Albion Mountain, Jim Sage and Cotterel Mountains, and in the foothills adjacent to the Sublett Range. Most of the mule deer use on public land is for winter range. Approximately 60 to 70 percent of the crucial winter range in the RMP area is on public land. Principal winter range includes the north end of the South Hills, Goose Creek drainage, foothills along the north and south end of the Albion Mountains, and Jim Sage Mountain.

Table 3-2 indicates the deer winter range and crucial winter range by Management Area while Map 3-7 shows the distribution of mule deer in the RMP area.

TABLE 3-2

Mule Deer Winter Range by Management Area

Management Area No.	Name	Total Winter Range	Crucial Winter Range
1.	Milner	0	0
2.	Foothills	33,136	12,728
3.	West Goose Creek	10,321	9,686
4.	Middle Mountain	15,041	6,076
5.	Administrative Site	0	0
6.	East Hills	2,708	0
7.	Albion	3,816	1,787
8.	City of Rocks	9,277	7,528
9.	Raft River Valley	937	177
10.	Jim Sage	36,164	22,780
11.	Cotterel	18,607	6,414
12.	Highway Unit	0	0
13.	Sublett	25,725	5,777
14.	Isolated Tracts	0	0
	Total Acres	155,732	72,953

According to Idaho Department of Fish & Game (IDFG) population estimates for the Cassia RMP area, a total of 6,116 deer are present during the peak use period of winter (Table 3-3).

TABLE 3-3

Mule Deer Population, Season of Use,
and Forage Needs by Management Area

Management Area		Spring March 16- June 15		Summer June 16- Sept. 15		Fall Sept. 16- Nov. 15		Winter Nov. 16- March 15		Total AUMs
No.	Name	No.	AUMs	No.	AUMs	No.	AUMs	No.	AUMs	
1.	Milner	5	2.8	5	2.8	5	1.9	5	3.8	11.3
2.	Foothills	265	149.2	265	149.2	265	99.5	1,035	776.4	1,174.3
3.	West Goose Creek	167	94.1	167	94.1	167	62.5	567	425.4	676.0
4.	Middle Mountain	381	214.3	381	214.3	381	142.1	723	539.3	1,110.8
5.	Administrative Site	0	- -	0	- -	0	- -	0	- -	- -
6.	East Hills	55	31.0	55	31.0	55	20.7	55	41.3	124.0
7.	Albion	358	201.5	358	201.5	358	135.0	678	514.1	1,052.1
8.	City of Rocks	139	78.0	139	78.0	139	52.5	326	244.7	453.2
9.	Raft River Valley	135	75.7	135	75.7	135	51.1	180	135.5	338.0
10.	Jim Sage	358	201.4	358	201.4	358	134.3	1,634	1,225.5	1,762.5
11.	Cotterel	328	184.5	328	184.5	328	123.0	368	276.1	768.1
12.	Highway Unit	74	41.6	74	41.6	74	27.9	74	55.8	166.8
13.	Sublett	1,231	692.6	1,231	692.6	1,231	461.7	448	336.1	2,183.0
	Passing Through		25				25			*50.0
14.	Isolated Tracts	20	11.3	20	11.3	20	7.5	23	17.4	47.4
Sub Total AUMs Annually										9,868
Sub Total AUMs Passing Through										50
Total AUMs Annually										9,918

* Passing through AUMs are based on a migration of deer from north to south in the fall for two weeks and south to north in the spring for two weeks. As the deer move south through allotments 5324, 5325, 5327, and 5328 the herd increases in size from about 150 animals to 500. Likewise, as the herd moves north in the spring, the number of animals decreases.

Antelope are limited to five of the RMP Management Areas. Two management areas, Raft River Valley (9) and the Highway Unit (12), provide 3/4 of the habitat used by antelope. Yearlong antelope range by management area is listed in Table 3-4 and portrayed on Map 3-7.

Estimates by IDFG indicate there are presently 130 antelope in the RMP area. Table 3-6 shows the present population, season of use, and forage demand in AUMs.

TABLE 3-4

Antelope Range by Management Area

Management Area		Management Area	
No. Name	Acres	No. Name	Acres
1. Milner	0	9 Raft River Valley	36,445
2. Foothills	0	10 Jim Sage	3,327
3. West Goose Creek	0	11 Cotterel	4,949
4. Middle Mountain	0	12 Highway Unit	33,304
5. Administrative Site	0	13 Sublett	255
6. East Hills	0	14 Isolated Tracts	0
7. Albion	0		
8. City of Rocks	0	Total Acres	78,280

TABLE 3-5

Antelope Population, Season of Use,
and Forage Needs by Management Area

Management Area		Spring March 16- June 15		Summer June 16- Sept. 15		Fall Sept. 16- Nov. 15		Winter Nov. 16- March 15		Total AUMs
No. Name		No. AUMs		No. AUMs		No. AUMs		No. AUMs		
9. Raft River Valley		61	21.2	61	21.2	61	14.3	61	28.7	85.6
10. Jim Sage		5	1.6	5	1.6	5	1.1	5	2.1	6.4
11. Cotterel		17	5.4	17	5.4	17	3.6	17	7.1	21.8
12. Highway Unit		35	11.0	35	11.0	35	7.4	35	15.1	44.9
13. Sublett		6	1.9	6	1.9	6	1.3	6	2.6	7.7
14. Isolated Tracts		0	- -	0	- -	0	- -	0	- -	- -
Total AUMs										166.4

Upland Game

Upland game birds include sage grouse, ring-necked pheasant, mourning dove, chukar partridge, Hungarian partridge and California quail (Map 3-8). The mourning dove and California quail will not be discussed later in the impacts portion of this document. Mourning dove are the most abundant, wide spread game bird in the RMP area, having responded favorably to manmade changes in habitat, and California quail are so closely associated to stream bottoms on private land that BLM management plans for these species would be unfeasible.

Sage grouse were once the most widely distributed and abundant game bird in the area. They are still scattered throughout, although their numbers have declined due to loss of habitat through conversion of sagebrush lands to cropland and/or grassland and the impact of livestock grazing on crucial nesting/brood-rearing areas associated with wetland/riparian sites. Table 3-6 shows acreages of general sage grouse habitat, winter habitat, and brood-rearing areas.

Ring-necked pheasant are distributed throughout the northern third of the RMP area where row crop farming is concentrated. Advanced farming technology and subsequent clean farming methods on private land have had detrimental effects

TABLE 3-6

Sage Grouse Habitat by Management Area

Management Area No. Name	General Habitat	Winter Areas	Brood- Rearing
1. Milner	0	0	0
2. Foothills	28,016	2,886	2,837
3. West Goose Creek	20,021	0	0
4. Middle Mountain	32,476	1,704	1,367
5. Administrative Site	0	0	0
6. East Hills	0	0	0
7. Albion	15,629	954	222
8. City of Rocks	11,818	0	0
9. Raft River Valley	61,763	0	556
10. Jim Sage	58,894	5,730	1,201
11. Cotterel	17,721	0	703
12. Highway Unit	0	0	0
13. Sublett	32,885	0	3,481
14. Isolated Tracts	0	0	0
Total Acres	279,223	11,274	10,367

on pheasant habitat and populations. Therefore, 3,965 acres on 36 isolated public land tracts have been set aside in accordance with the Sikes Act to provide crucial spring nesting and winter habitat.

Habitat for the chukar partridge consists of steep rugged canyons with many talus slopes and rocky outcrops. The major portion of their habitat is along the foothills of the South Hills, Goose Creek drainage, along the west side and north end of Cotterel Mountain, and the west and south side of the Jim Sage Mountain range (Management Areas 2, 3, 4, 10, and 11). IDFG figures for the chukar partridge indicate the population appears to be static.

The Hungarian partridge is distributed throughout the area and can be found in any type of habitat associated with or adjacent to agricultural land. The best concentrations occur on grassy foothill rangeland adjacent to dry farm croplands. One of the factors that has had a detrimental effect on "huns" is the loss of winter food due to the shift to clean farming practices on private land, principally fall plowing of grain stubble fields.

Sensitive and Endangered Species

Of the animals in the Cassia RMP area, only the bald eagle and peregrine falcon are on the federal list of threatened or endangered species. Numerous sightings of bald eagles have been reported in the area, but there are no known nesting sites. Eagle use is concentrated along the Snake River from late fall through winter. Although the peregrine falcon may be present in winter and spring, it is rarely seen and no nest sites have been located in the RMP area.

Sensitive species are those whose restricted range, habitat requirements, or low population numbers make them vulnerable to elimination if they suffer significant habitat loss. Fourteen sensitive species may be found in the RMP area. The ferruginous hawk is of special interest because the largest known nesting population of these birds in North America occurs in the Cassia RMP

TABLE 3-7
Sensitive and Endangered Wildlife

Common Name	Federal Status	State Status	Occurrence
Kit Fox		Sensitive	Rarely, if at all
River Otter		Sensitive	Occasionally
Lynx		Sensitive	Rarely, if at all
Bobcat		Sensitive	Yearlong breeder
Spotted Bat		Sensitive	Rarely, if at all
Bald Eagle	Endangered		Winter migrant
Osprey		Sensitive	Spring and fall migrant
Gyr Falcon		Sensitive	Winter migrant
Peregrine Falcon	Endangered		Rare fall and spring migrant
Merlin		Sensitive	Spring, possible breeder
Columbian Sharp-Tailed Grouse		Sensitive	Yearlong breeder
Mountain Quail		Sensitive	Rarely, if at all
Long-Billed Curlew		Sensitive	Common spring & summer breeder
Burrowing Owl		Sensitive	Common Spring & Summer breeder
Ferruginous Hawk		Sensitive	Common spring & summer breeder
White-Faced Ibis		Sensitive	Rarely, if at all

area. Many of these species are common breeders in the area and stay either yearlong or return in the spring to nest. Other species occur in the fall, winter or spring during migration. Table 3-8 lists endangered and sensitive species, their status and occurrence in the RMP area. (See Map 3-9.)

Aquatic Wildlife

Portions of 11 streams provide 20.5 miles of habitat for resident coldwater game fish (Map 3-9). Species include rainbow, cutthroat and brook trout. Table 4-10, Alternative A, portrays present stream condition class rating and fisheries potential.

Furbearers

Riparian areas are very important for racoon, weasel, skunk, beaver and muskrat. Current inventory and harvest information is very scarce for these furbearers. Other species harvested for their pelts are coyotes and bobcats, both of which are widespread throughout the EIS area.

Non-Game

Approximately 310 species of non-game bird and mammal species inhabit the Cassia RMP area. No hunting season or harvest is allowed for these species.

These species make up the bulk of the fauna in the RMP area. Most of these species fulfill an important ecologic niche as major prey species for bird and mammalian predators. Many non-game species depend on riparian areas.

Waterfowl

Major areas of waterfowl use include Goose Creek Reservoir, the upper and lower end of Raft River, Marsh Creek, Warm Creek, and the Snake River in the Milner and Lake Walcott (Minidoka National Wildlife Refuge) areas. Approximately three miles of public land along the shoreline of the Snake River at Milner (Management Area 1) provide important nesting and brood-rearing habitat. Three ponds in the Warm Creek Allotment have been fenced and provide some nesting habitat. Goose Creek Reservoir is surrounded by public land but steep banks preclude waterfowl nesting. Shorebirds and waterfowl are intermittent visitors to smaller streams throughout the area, particularly during the spring and fall migration periods. Some nesting occurs along these smaller water courses.

LIVESTOCK MANAGEMENT

A total of 147 livestock permittees are licensed to graze on public lands in the Cassia RMP area. These permittees run on 152 grazing allotments which include 469,293 acres of public land (Map 1-2). Thirty-five of these allotments have no adjudicated grazing privileges. These areas are used in emergency situations, helping to alleviate forage shortages due to drought, wildfire, or other action. The grazing preference of the permittees is 76,777 AUMs. Of this preference, 56,172 AUMs is active preference; 20,605 AUMs is suspended non-use. During the period 1976 to 1981, actual use (six year average) has averaged 58,316 AUMs.

RECREATION

The public land in the RMP area provides a diverse choice of recreation opportunities. Recreation use has been increasing steadily with the majority of use associated with dispersed recreation activities. Milner (Management Area 1) includes some major developments for recreation use. These developments include a boat launch, a nature trail, picnic sites, and archery and trap shooting facilities (developed under R&PP leases). Interpretive developments for the Oregon Trail are also present. A picnic site is located in each of Management Areas 8 and 10, with two semi-developed camping areas located in Management Area 11.

The majority of recreation use in the RMP area is dispersed in nature. The amount of recreation use associated with the existing developments is minor in comparison with dispersed activities. Two activities would be most affected by the four alternatives, off-road vehicle (ORV) use, and hunting. Other recreational activities could be indirectly affected; but impacts would not be significant and will, therefore, not be analyzed in this EIS. Table 3-8 lists the projected visitor days of recreation use for hunting, off-road vehicles, and other dispersed recreation activities. The ORV use estimate includes motorcycles, four-wheeled vehicles, and snowmobiles.

TABLE 3-8

Projected Recreation Use on Public Land (Visitor Days)

Activity	Visitor Use*	
	1981	2000
Hunting	17,308	24,096
Off-Road Vehicle Use	22,410	41,200
Other Dispersed Activities	173,040	262,550

* Hunting projections were obtained from the Idaho Department of Fish and Game and are based on their proposed species management goals. All other use projections were derived from the Idaho Department of Parks and Recreation Statewide Comprehensive Outdoor Recreation Plan (Preliminary 1983).

VISUAL RESOURCES

The public land has been inventoried to determine the quality of the visual resources. Evaluation of the land was based on landform, vegetation, water, color, scarcity, influence of adjacent scenery, and cultural modifications (intrusions) in accordance with the visual resource management (VRM) system presented in BLM Manual, 8410-8411. For information on the visual resource inventory methodology, see Appendix J.

The VRM system provides for management of the visual resource to prevent degradation. Management classes based on scenic quality, sensitivity level, and distance zone are established to provide appropriate objectives for management of visual resources. The acres and percentage of public land in each VRM class in the RMP area are shown in Table 3-9. Locations of the classes are shown on Map 3-10.

CULTURAL RESOURCES

Ninety-four known cultural resource sites and approximately 42 miles of traceable emigrant trails are located on public land in the RMP area. Sites and trail segments are distributed in the Management Areas as shown in Table 3-10.

Results of a Class II cultural resource inventory indicate that the Goose Creek and Snake River areas have the highest potential for cultural resource values. The South Hills, Oakley Fan, and Middle Mountain areas have intermediate potential. The remainder of Cassia County has low potential for cultural resource values. The areas of high and intermediate potential roughly correspond to Management Areas 1, 2, 3, and 4. Projections based on various inventory methods indicate that between 400 and 700 cultural resource sites are located on public land in the RMP area.

Although formal evaluations of the quantity and quality of the information contained in the sites have not been undertaken, it is assumed that most, if not all, of the sites contain information important to history or prehistory and

TABLE 3-9

Acres and Percent of Public Land By VRM Class

	Acres	Percent
Class I	0	0.0
Class II	8,749	1.8
Class III	54,460	11.4
Class IV	412,624	86.7
Class V	440	0.1

The objectives of the VRM Classes are:

- Class I - Provides primarily for natural ecological changes, though limited management activities may occur. This classification applies to wilderness areas, some natural areas, wild portions of wild and scenic rivers, or other similar situations.
- Class II - Provides for changes in the basic elements (form, line, color, texture) as a result of management activity. These changes should not be evident in the characteristic landscape.
- Class III - Provides for visual contrasts caused by a management activity. Such contrasts may be evident, but should remain subordinate to the existing characteristic landscape.
- Class IV - Provides for contrasts which may attract attention and be dominant features in the landscape, though they should repeat the basic elements of the characteristic landscape.
- Class V - Identifies areas where change is needed. Naturalistic character has been disturbed to a point where rehabilitation is needed to bring the area back into character with the surrounding landscape. This is an interim, short-term classification until one of the other objectives can be reached through rehabilitation and enhancement.

are thus technically eligible for inclusion in the National Register of Historic Places. The diversity of sites varies from small, seemingly shallow lithic scatters to rockshelters with possible stratification. Of particular note are the 12 rockshelters and four quarry types located in the Goose Creek area. These sites apparently formed the core of a regional system of cultural ecology based in the Goose Creek drainage. Further discussion of this system is contained in the Class II inventory which is on file in the Burley District Library.

The condition of the sites is generally good, with 16 percent rated excellent, 46 percent rated good, 26 percent fair, 8 percent poor, 1 percent destroyed, and 3 percent unknown. The four major emigrant trails--Oregon Trail, California Trail, Hudspeth's Cutoff, and Salt Lake Cutoff--do not fare quite so well. Of the 54.5 miles of trails, including destroyed segments, 5 percent (2.75 miles) are intact, 72 percent (39.25 miles) are disturbed, and 23 percent (12.5 miles) are destroyed.

TABLE 3-10

Distribution of Cultural Sites and Miles of Historic Trail by Alternative

Management Area	A		B		C		D*	
	Sites	Miles	Sites	Miles	Sites	Miles	Sites	Miles
1	4	4.50	4	4.50	4	4.50	4	4.50
1a	0	0	-	-	-	-	-	-
2	8	0	8	0	8	0	8	0
3	28	0	28	0	28	0	28	0
4	18	3.75	18	3.75	19	3.75	19	3.75
4a	1	0	1	0	0	0	0	0
5	0	0	0	0	0	0	0	0
6	1	0	1	0	1	0	1	0
7	2	1.00	2	1.00	2	1.00	2	1.00
8	1	3.20	1	3.25	1	3.20	1	3.20
8a	0	0	0	0	0	0	0	0
8b	0	.05	-	-	0	.05	0	.05
9	8	14.50	7	14.50	6	14.25	6	14.25
9a	0	.50	0	0	0	0	0	0
9b	-	-	1	.50	2	.75	2	.75
10	4	3.00	5	3.00	5	3.00	5	3.00
10a	1	0	-	-	-	-	0	0
11	7	4.50	7	4.50	7	4.50	7	4.50
12	4	0	4	0	4	0	4	0
12a	1	7.00	1	7.00	1	7.00	1	7.00
12b	-	-	-	-	-	-	0	0
13	3	0	3	0	3	0	3	0
13a	0	0	-	-	-	-	-	-
14	<u>3</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>0</u>
	94	42.00	94	42.00	94	42.00	94	42.00

* The distribution of sites and trails under Sub Alternative D is the same as portrayed for Alternative D.

Since cultural resources are finite and non-renewable, the trend in their condition is generally downward. Any alteration to the resource results in a loss of some of the potentially recoverable information. The losses are permanent, cumulative, and irreversible. Hence, the trend can never be upward. The best that can be worked for is a static trend. The agents that are

responsible for this downward trend vary both in their frequency of occurrence and their intensity of impact. Surface erosion and livestock trampling account for nearly half the number of recorded impacts on Cassia County sites. However, the intensity of these impacts is generally not as great as the intensity associated with agents such as construction of projects and vandalism. Perhaps in some instances the effects of these impacts can be arrested and the downward trend changed to a static trend.

MINERAL AND ENERGY RESOURCES

There are presently 108 oil and gas leases in the RMP area, covering 371,067 acres or 78 percent of the public land. Other energy resources consist of five geothermal leases comprising 7,098 acres.

Non-energy resources consist of mining, which is predominately building stone, and sand and gravel extraction. Building stone (Oakley stone) claims are localized on 2,290 acres in Management Area 4 on Middle Mountain. There are two community pits for sand and gravel and one common use building stone area that have been established for the sale of these commodities to the public. There are eighteen free use permits from which State and local highway districts remove gravel for road maintenance and construction.

The location of oil and gas leases, sand and gravel sites, and building stone are shown on Map 3-11.

LANDS

There are currently 21 pending exchange applications involving approximately 11,000 acres of public and private lands within the RMP area. There are also 5 pending Desert Land Entry applications on file involving 1,079 acres of public land. Public auctions will be held in the summer of 1983 to sell 40 and 39.52 acre parcels of public land in accordance with the Bureau's Land Sale Program.

Currently there are about 220 existing rights-of-way within the RMP area. Approximately 77 percent of these R/W are linear including highways, access roads, power and telephone lines, pipelines, and canals. Cassia County has filed three applications under the Recreation and Public Purposes Act for sanitary landfill leases. Presently there are two current and one expired landfill lease on public land within the county.

ECONOMICS

Income

Total personal income in Cassia County was \$138.8 million in 1980. This amounts to a five percent increase since 1975 after taking into account the effects of inflation. This is a much slower rate of growth than the State's increase of 12 percent over that time. The 1980 county farm income amounted to \$52.9 million. In 1980 meat animals accounted for 39.1 percent of total farm cash

receipts. Assuming income and cash sales are directly related, then meat animal income in 1980 would amount to \$20.7 million (Bureau of Economic Analysis 1982).

Ranch Budgets

To determine what impact the various alternatives would have on rancher income, ranch budgets were prepared. Budgets for six groups (five cattle, one sheep) were developed. The basic characteristics of each ranch budget group are in Table 3-11. The results of the budgeting are in Table 3-12. The full budgets, along with a complete description of the process used to develop the budget, can be found in the Analysis of the Management Situation for the Cassia RMP, on file in the Burley District Office.

Total returns above cash costs for all Cassia RMP permittees would be \$970,900.

Table 3-11

Basic Ranch Group Characteristics

Group	Number of Cattle/Sheep	Total Herd Size	Average Herd Size	Number of Permittees
1	0-99 Cattle	2,416	60	40
2	100-199 Cattle	5,408	139	39
3	200-349 Cattle	6,700	258	26
4	350-599 Cattle	7,050	415	17
5	600 + Cattle	22,220	1,111	20
6	All sheep	31,100	3,888	8*

* Three of these permittees also have cattle herds.

TABLE 3-12

Ranch Budget Summary

	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Total Revenue	\$ 15,594	\$ 36,660	\$ 61,461	\$107,563	\$319,220	\$291,656
Total Cost	\$ 46,072	\$ 82,680	\$129,452	\$174,505	\$450,713	\$378,005
Cash Costs	\$ 15,072	\$ 35,830	\$ 60,752	\$101,005	\$305,213	\$228,211
Other Costs	\$ 31,000	\$ 46,850	\$ 68,700	\$ 73,500	\$145,500	\$149,794
<u>Returns</u>						
Above Cash Cost	\$ 522	\$ 830	\$ 709	\$ 6,558	\$ 14,007	\$ 63,445
Above Cash Cost and Family Labor	\$ -9,478	\$ -11,170	\$ -13,291	\$ - 7,942	\$ -993	\$ 48,445
To Total Investment	\$ -21,478	\$ -25,170	\$ -29,291	\$ -25,442	\$ -20,393	\$ 33,945
To Land	\$ -23,878	\$ -30,420	\$ -40,891	\$ -39,242	\$ -60,093	\$ 81

Employment

Total Cassia County employment was 10,108 in 1980. This represents a 5 percent increase since 1975, a much slower rate of growth than the State's increase of 18 percent for the same time frame. Total farm employment was 2,330, or 23 percent of total county employment. Agriculture is the number one employer in the county. The amount of employment related to the production of meat animals is not possible to identify.

Permit Values

As early as 1925 it was recognized that the annual value of the federal grazing privilege was being capitalized into rancher property. "It is argued that long use of the range in connection with the early settlement of agricultural lands has resulted in capitalizing the values of public pasturage as part of the value of the ranch...." (USDA 1925).

A report published by the Utah State University Experiment Station stated, "There was nothing illegal or unethical in the fact that grazing permits took on value; ranchers just reacted to an economic situation that was created by government policy. Permit values rose because ranchers who have grazing permits were capturing economic rents in the form of low cost grazing, i.e., the grazing fee and recognized non-fee costs did not equal the value of the grazing to ranches. Thus, the authorization to use the federal lands and the associated economic rents were capitalized into rancher-owned assets. This value could show up either as a permit value or as an increased value of the commensurate property." (Nielson and Workman 1972.)

BLM's position on permit values is based on very explicit language in Section 3 of the Taylor Grazing Act of 1934 which states "so far as consistent with the purposes and provisions of this Act, grazing privileges recognized and acknowledged shall be adequately safeguarded, but the creation of a grazing district or the issuance of a permit pursuant to the provisions of this Act shall not create any right, title, interest, or state on or to the lands." Thus, any capitalized value associated with grazing permits has no legal basis, and, as a result a rancher has no compensation for loss of this value.

Magazine articles and research results have often been in conflict on the subject of permit values. Nevada rancher, Dean Rhoads, in an article in the New West Magazine stated that "the forage right for a single cow on the public range now sells for anywhere from \$1500 to \$3000 in the Elko area." (Boly 1980.) A survey done in New Mexico by ranch appraisers and credit officers placed the value of Forest Service permits at between \$944 and \$1163 per animal unit, depending on the area in New Mexico. Bureau of Land Management values varied from \$667 to \$888. (Fowler and Gray 1980.) On the other hand a study in eastern Oregon found "the inclusion of public grazing privileges were found to have no significant impact on the level of private grazing land sale prices." (Winter and Whittaker 1979.)

Any impact to capital value of grazing permits is only realized at time of ranch sale. Also, the Bureau is currently studying the grazing fee formula. If this study results in setting grazing fees such that the fee plus non-fee costs equal the value of the grazing to the rancher, then all capital value will be eliminated.

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

SOILS AND WATERSHED

Erosion

Present erosion trends are expected to continue and/or follow the trend in range conditions if ALTERNATIVE A is selected. The existing erosion problems identified on Map 3-2 would continue unless mitigated. These areas are primarily located in the upper portion of the Goose Creek drainage, (Management Areas 3 and 4). Livestock grazing would result in continued loss of productivity through soil compaction and decreased permeability, particularly in areas where cattle congregate. Areawide long-term erosion would average about 4.1 tons/acre/year.

Under ALTERNATIVE B, long-term potential erosion rates would shift from 4.1 to 5.1 tons/acre/year, an overall increase of 24 percent. Table 4-1 indicates that erosion would increase on 71 percent of the public land. This increase in erosion would mainly result from increased utilization by livestock (46 percent increase in stocking rates from current use). Additional livestock use would result in an overall decrease in soil productivity by increasing soil compaction and decreasing permeability over a greater area, particularly where cattle congregate (water troughs, wetland/ riparian zones, shady areas, valley flats). Increased ORV use in the Milner and East Hills areas (Management Areas 1 and 6) would result in adverse soil impacts including increased gully erosion, increased soil compaction, and reduced permeability. Mechanical range treatments in the southern portion of the Goose Creek drainage (Management Areas 3 and 4) may lead to severe erosion problems if conducted on those highly erosive soils identified on Map 3-2. Management restrictions on those highly erosive soils were identified in the watershed portion of the Cassia Analysis of the Management Situation (WS-2-2/20/83-Table 1), on file in the Burley District.

Implementation of ALTERNATIVE C would decrease overall long-term erosion from 4.1 to 3.8 tons/acre/year, about seven percent. Overall, 24 percent of the public land would be subjected to decreased erosion (Table 4-1). Decreased erosion rates would result from greater cover. Compaction problems would

TABLE 4-1

Erosion Potential By Alternative

Alter- native	Increased		No Change		Decreased	
	No. of Allot.	Percent of Public Land	No. of Allot.	Percent of Public Land	No. of Allot.	Percent of Public Land
B	86	71	58	27	8	2
C	9	2	103	74	40	24
D	4	1	83	76	65	23
Da	0	0	35	23	119	77

See Appendix D for potential erosion rates by allotment by alternative.

still be aggravated, particularly around water sources. Increased trail bike use proposed for the southern portion of Cotterel Mountain (Management Area 11) may result in some increased gully erosion and compaction in the vicinity of developed trails. Mechanical range treatments in the southern portion of the Goose Creek drainage, northwest side of Black Pine Mountain, and the upper portion of the Raft River Valley (Management Areas 3, 4, and 9) may lead to severe erosion problems if conducted on those highly erosive soils identified on Map 3-2. Non-mechanical range treatments should be considered on these soils to keep erosion within tolerable limits. Management restrictions on these areas of highly erosive soils were identified in the watershed portion of the Cassia Analysis of the Management Situation (WS-2-2/26/83-Table 1), on file in the Burley District.

ALTERNATIVE D would decrease overall erosion 15 percent from the present 4.1 to 3.5 tons/acre/year. Long-term potential erosion rates would decrease on 23 percent of the public land (Table 4-1). Although over-all stocking rates would be lower on many of the allotments, areas where cattle presently congregate would still receive intense use. Since cover, compaction, and productivity would remain essentially the same in those areas, no net beneficial effect would be seen in concentrated use zones. Greater restrictions on ORV use would result in fewer soils impacts.

Under SUB ALTERNATIVE D, long-term potential erosion rates would show a 46 percent decrease from the present 4.1 to 2.2 tons/acre/year. Table 4-1 indicates that erosion would decrease on 77 percent and remain the same on 23 percent of the public land. Removal of livestock grazing would significantly benefit soil and watershed conditions by decreasing soil compaction, increasing vegetative cover, improving soil structure, increasing soil productivity, and increasing soil water holding capacity.

Present and potential sheet erosion rates by grazing allotment by alternative, are listed in Appendix D.

Water Quality

Under ALTERNATIVE A, with no further emphasis on best management practices for livestock, roads, mines, and domestic water protection, present water quality conditions listed in Table 4-2 would persist with continued degradation over

the long term. The greatest areawide threat to surface waters and their uses comes from sediment loads in perennial streams.

Present sediment production from public lands, particularly in Management Areas 3 and 4, will gradually deplete Oakley Reservoir storage capacity over the long term. There is also potential for continuous sediment clogging of irrigation canals supplied from ephemeral and perennial streams leaving public land in Management Areas 2, 3, 4, 6, 7, 8, 9, 10, and 11.

Another sediment problem is evident in perennial streams with relatively productive game fisheries and those with fisheries potential. As an example, continued sediment accumulation in area creeks such as Cassia Creek, Dry Creek, Cold Creek, and Trapper Creek could permanently inhibit natural reproduction of game fish and other desirable aquatic life.

ALTERNATIVE A does not include a management objective aimed at protecting those springs that supply domestic water to the City of Oakley and other area homes. Present management has resulted in bacterial contamination of the Oakley water supply. With continued livestock use at existing levels and no protection of the water source, periodic bacteria outbreaks will persist.

ALTERNATIVE B proposes increased use of the vegetative and mineral resources, resulting in negative water quality impacts to most streams in Management Areas 2, 3, 4, 7, 9, 10, and 11. Greater livestock numbers, seven percent more in the short term increasing to 46 percent in the long term with extensive land treatments, would result in increased erosion and riparian utilization. This would likely produce warmer summer water temperatures, with high sediment content, greater bacterial concentrations, increased nutrient content, and a probable greater oxygen demand. Without livestock management focusing on improved aquatic conditions, water quality would decline in late summer to consistently eclipse Idaho standards for the preceding parameters.

Mineral development, also encouraged in ALTERNATIVE B, has potential to cause irreversible damage to both ground and surface water quality if not closely monitored and supervised. Increased mineral exploration and development would not only contribute unnatural contaminants, such as heavy metals and hydrocarbons, to area streams, but could also increase the concentration of these contaminants as industry use of water in conjunction with their operation lowered stream levels. This would greatly influence and impact downstream uses.

The source of the Oakley City water supply originates with springs located near stone quarries on Middle Mountain. Although contamination of this source by the quarry operations is remote, no protective management objectives or other land use measures that would guarantee protection of this water source have been included in the alternative.

Other components of this alternative which have the potential to adversely affect water quality include the large acreages open to limited fire suppression (89 percent), unrestricted wheeled vehicle use on 88 percent of the area, and virtually no restrictions on the harvest of woodland products. Depending on the severity of these management actions, surface disturbance could expose the soils and increase erosion potential and sediment loads in streams. If not rehabed, disturbed areas could contribute to increased pollution of water sources. However, wood harvest and fire, when restricted

to suitable sites and followed by rangeland seeding, could actually improve water quality through increased watershed cover and improved soil stability with lower stream sediment and nutrient loads over the long term. This long-term improvement in water quality conditions would be preceded by short-term increases in sediment and nutrient loads, regardless of the rehab action taken. These potential impacts apply primarily to Management Areas 2, 3, 4, 7, 9, 10, and 11. Again sediment yield is the primary concern if these actions occur inside the area that influences water ways.

In summary, ALTERNATIVE B would yield short-term sediment increases from proposed rangeland treatments. This pollutant would remain at high levels through the long term due to greater livestock concentrations and other soil disturbing factors such as unrestricted vehicle use, increased mineral activity and large scale application of limited fire suppression. Sediment yield and other water quality parameters would severely inhibit aquatic habitat and other downstream uses in the foreseeable future.

Under ALTERNATIVE C, the 34 percent long-term increase in livestock use would pose a threat to water quality in perennial streams. Management plans would be prepared for most allotments receiving significant livestock increases. Mitigation of impacts to perennial stream qualities would be developed and incorporated into the plans as necessary. To insure that laws and policies pertaining to water quality are being met, monitoring would occur as in the monitoring plan (Appendix C). If management techniques being implemented are failing to meet desired aquatic objectives, additional mitigation or a change in management would be undertaken to eliminate the problems.

Several proposed land treatments in management areas 2, 3, 4, 7, and 9 are located in perennial stream watersheds. Some short-term increases in sediment production would occur. Over the long term, sediment production would stabilize, condition would improve, and additional forage would be available. When combined with grazing management systems, the land treatments would decrease sediment production. The increased forage would also result in a reduction in livestock dependence on stream and riparian areas. Aquatic conditions would stabilize and some improvement would be possible.

Other impacts to water quality would result from 90 percent of the area being subject to limited fire suppression and the lack of restrictions on wood harvest. These impacts would be short term in nature and would vary according to the different sites. Mineral exploration and development would pose impacts similar to those stated in Alternative B. Vehicle travel is limited in key areas under this alternative and thus would have no negative impact. Adequate protection (Management Sub Area 4a) has been afforded those springs feeding the Oakley City water supply, eliminating the likelihood of future bacterial pollution of this domestic water supply.

To sum up, ALTERNATIVE C would result in better water quality than anticipated with Alternative B. By utilizing sound management techniques, long-term water quality conditions on public lands would remain static or show some improvement over current conditions.

ALTERNATIVE D provides the second highest quality water of all alternatives. Goals are set that, if met, would produce relatively stable watersheds yielding minimal nutrients and sediments. Reduced livestock would lessen the pressure on streams and when combined with structures or increased management

geared toward enhancing riparian areas as proposed, negative impacts to water quality from livestock would be minimized and possibly eliminated.

Other adverse influences on water quality such as roads, mining, limited fire suppression, and wood harvest have been seriously restricted when associated with water ways, therefore eliminating negative impacts.

ALTERNATIVE D designates a specific area (Management Sub Area 4a) to protect the Oakley City water supply. This designation and other guidance would guard public health and safety by insuring cleaner water from these springs.

SUB ALTERNATIVE D would favor water quality. The effects would be similar to those of Alternative D except that the water resource would respond sooner. Soil cover would improve rapidly and within a few average years, would approach optimum. Perennial streams and associated riparian areas would stabilize without livestock use, and woody vegetation would grow and reproduce where it presently is absent or decadent due to heavy use.

Eliminating livestock use would result in a dramatic drop in late summer coliform bacteria counts in the short term, perhaps as early as a year following the removal of livestock. Other short-term impacts include a progressive decrease in sediment and nutrient loads, and as riparian vegetation rebounded water temperatures would lower proportionally. In the long term this alternative would maximize watershed stability, which in turn would optimize water quality conditions so that state water quality standards for multiple uses would be met on a year round basis.

Although increased soil cover would significantly improve watershed stability it would also increase the probability of wildfire as a result of heavy fuel buildup. Intense fires could have the short-term effect of lowering water quality through increased sediment and nutrients.

In the short term this alternative would dramatically improve water quality and on an areawide basis would sustain those standards into the long term. In localized areas wildfire could significantly lower water quality pending reestablishment of adequate rangeland cover.

Water quality impacts under all alternatives are portrayed in comparative fashion in Table 4-2.

Water Yield And Flood Prone Areas

ALTERNATIVE A is an extension of present operating procedures with no significant management changes including livestock grazing at present intensities with no additional vegetative treatments in support of the grazing program. This alternative also fails to provide adequate management guidance for the flood prone areas of the Raft River and Goose Creek drainages.

Present management has not resulted in an appreciable improvement in watershed condition. The rangeland lacks sufficient cover and has an unnatural abundance of bare ground. Research has shown that bare ground has slower infiltration rates than soil with cover. Once soil is exposed under grazing pressures, perennial vegetation has difficulty becoming reestablished, a trend

TABLE 4-2
Impacts to Perennial Streams

Grazing Allotment No.	Name	Stream Name (BLM Miles/ Total Length %)	Parameters*	Alt. A	Alt. B	Alt. C	Alt. D	Sub Alt. D
4027	Goose Creek Group	Birch Creek (2.9/14%)	Riparian Veg. Fair Water Quality U-M,B Stream Condition Fair	-	0	+	+	+
		Blue Hill Creek (4.7/28%)	Riparian Veg. Fair Water Quality U-B,T,S Stream Condition Fair	-	+	+	+	+
		Cold Creek (7.0/82%)	Riparian Veg. Fair Water Quality A Stream Condition Good	-	+	+	+	+
4068	Dry Creek	Dry Creek (5.9/22%)	Riparian Veg. Excellent Water Quality U-B,T,S,O Stream Condition Good	-	0	0	0	0
4078	Mabey Goose Creek	Trapper Creek (.7/5%)	Riparian Veg. Fair Water Quality U-B,T,S Stream Condition Fair	0	0	0	0	+
4082	Matthews Goose Creek	North Carson Creek (.5/14%) Summit Station Creek (.3/7%)	Riparian Veg. Good Water Quality A Stream Condition Good	0	0	0	0	+
4083	Willow Creek Anderson	Willow Creek (.2/3%)	Riparian Veg. Excellent Water Quality A Stream Condition Excellent	0	0	0	0	+
4093	Wild Rose Grazing Assoc.	Goose Creek (2.4/11%)	Riparian Veg. Poor Water Quality U-B,T,S Stream Condition Poor	0	0	+	+	0
4026		Beaverdam Creek (3.9/5%)	Riparian Veg. Fair Water Quality U-B,T,S Stream Condition Fair	-	0	+	+	+
5002	South Cotterel	Coe Creek (1.4/35%) Nibbs Creek (1.5/100%) Summit Creek (.5/8%)	Riparian Veg. Fair Water Quality U-B,S Stream Condition Fair	-	0	+	+	+
5003	Jim Sage	Quaking Asp Creek (2.1/46%) Womack Canyon (3.9/98%) Jim Sage Canyon (2.1/100%)	Riparian Veg. Good Water Quality A Stream Condition Good	-	0	+	+	+
5015	Howell Creek	Howell Creek (1.2/13%)	Riparian Veg. Excellent Water Quality A Stream Condition Excellent	-	0	+	+	+
5021	Middle Hill	Cassia Creek (.8/3%)	Riparian Veg. Good Water Quality U-B,S Stream Condition Good	-	0	+	0	0
5027	Circle Creek	Circle Creek (.5/8%)	Riparian Veg. Good Water Quality A Stream Condition Good	-	0	0	0	0
5036	Junction Seeding	Upper Raft River (1.4/2%)	Riparian Veg. Poor Water Quality U-B,T,S,O Stream Condition Poor	-	0	0	0	+
5040	Johnson Creek			0	0	0	0	0
5043	Narrows Seeding	Lower Raft River (.8/1%)	Riparian Veg. Poor Water Quality U-B,T,S,O Stream Condition Poor	-	0	0	0	+
5323	North Lake Fork	Sublett Creek (.8/4%)	Riparian Veg. Fair Water Quality A Stream Condition Good	-	0	+	+	+
5325	Sublett			0	0	+	+	+

* Riparian Vegetation

Baseline conditions were derived from RMP inventories and stated as poor, fair, good or excellent. Any expected deviation away from this present condition due to alternatives will be listed as +, -, or 0 to signify positive (+), negative (-), or no change (0) from present condition.

Water Quality

This category evaluates available water quality parameters and established water standards to simply state existing water quality conditions as acceptable (A), or unacceptable (U). U ratings are followed by the initial of the factor yielding the water unacceptable, such as:

- S - Sediment
- B - Bacteria
- M - Heavy Metals
- O - Dissolved Oxygen
- T - Water Temperature

Anticipated impacts to water quality will be noted again with +, -, and 0 as above.

Stream Condition

This category envelopes all stream quality measurements into a single unit which will characterize the streams overall existing condition as poor, fair, good, or excellent. Impacts due to each alternative will be documented as a +, -, or 0 to signify positive (+), negative (-), or no change (0) as used previously.

that is hard to reverse. As long as the majority of the watersheds vegetative resource remains in this depleted state or moves farther down the ecologic ladder, both of which are probable under this alternative, a continued long term trend toward increased water yields of lesser quality and floods of greater intensity and frequency can be expected.

Management Areas with the greatest potential for increased runoff and flood frequency are 2, 3, 4, 8, 9, 10, and 11. Without adequate management direction for flood prone areas we can expect flood damage to increase on both the public and adjoining private land.

ALTERNATIVE B raises the probability of increased runoff and flood potential. Large scale proposed vegetation manipulations (25 percent of the RMP area), expanded grazing privileges (plus 46 percent in the long term), expanded mineral and energy development, limited fire suppression, and unrestricted motorized recreation programs all contribute to soil disturbance and increased bare ground, ultimately resulting in increased runoff and enhanced flood threat. To compound the problem, much of this increased use will be concentrated in and along flood prone watershed where disturbance to soils and vegetation can increase flood damage downstream. The exception to these impacts is in Management Sub Area 9b where specific guidance is supplied to limit soil disturbance and maximize stability in identified flood prone areas.

Short-term impacts from the implementation of ALTERNATIVE B would be restricted to runoff increases caused by the removal of native vegetation in areas of fire or land treatment. The greatest threat is from intense summer storms occurring during treatment or before the seeded species become established. In the long term, water yields will increase proportionally with the trend to more bare ground, although the quality of this surface water will decline due to increased sediment. Flood events from summer storms will increase in frequency and intensity. These impacts apply to mountainous watersheds in Management Areas 2, 3, 4, 7, 8, 10, 11, and 13. The flood prone zones in Area 9b have been accommodated in this plan. In the long term, through conscientious management and structures if need be, the flood problem in these drainages should be partially curtailed if not eliminated.

ALTERNATIVE C provides for livestock use at rates 34 percent greater than the existing situation. In contrast to Alternative B it contains objectives to improve general watershed conditions and protect key drainages and other critical sites. Increased livestock use would be accommodated by increased forage production resulting from land treatments. However, management would be geared toward protecting critical watersheds.

Short-term impacts under ALTERNATIVE C would be similar to those in Alternative B. There would be a temporary increase in low quality water yield from treated lands. Potential would exist for flash floods generated from summer thunderstorms on large treatment areas until permanent vegetation is established. Long-term impacts would produce slight increases in water yield due to land treatments. Floods should decrease in frequency. Damage potential in flood prone areas should be alleviated through channel protection and structural developments. Critical watersheds in poor condition would be protected or rehabed to restrict runoff and encourage infiltration of precipitation.

In summary, ALTERNATIVE C provides protection for critical soils and flood-plains while increasing uses in areas which can tolerate it. This option

should slightly increase water yields from higher elevation summer storms while decreasing flood threats area wide, particularly in identified flood prone areas in Management Areas 3 and 9.

ALTERNATIVE D relies on sound conservation techniques to improve watershed conditions. Stocking level reductions ranging from 14 percent to 37 percent in mountainous units, plus allotment management plans aimed at natural resource improvement should reduce grazing pressures on lower condition watersheds, providing an increase in vegetative cover and site stability. Other soil disturbing uses of public land have also been restricted from key areas such as floodplains and susceptible soils to insure positive development of desirable vegetation.

Short-term impacts would be very subtle and would probably go unnoticed, but lower use levels would promote vegetative vigor, seedlings would have better survival success, organic litter would accumulate, and the ecosystem would begin to stabilize. In the long term, watershed cover should be significantly better than at present. Improved cover would enhance soil permeability and progressively reduce runoff, thereby reducing the flood threat. These conditions would nearly eliminate the threat of summer flash floods. Although cover has little effect on spring floods, this alternative allows for in-channel structures to control spring flood waters, thus reducing that threat.

Surface water yield would decline in the long term, but what water comes off would be of superior quality when compared to today's silt laden water. Improved soil permeability would also contribute to aquifer recharge, which in the long term, may be a more efficient use of precipitation than present runoff uses, particularly in light of today's dwindling ground water supply.

In summary, ALTERNATIVE D would, over the long term, decrease runoff and the threat of flooding. The potential to enhance aquifer recharge at higher elevations would also occur. This would also increase recharge to valley aquifers.

SUB ALTERNATIVE D would yield impacts similar to those of Alternative D, but due to the absence of livestock grazing watershed cover would accumulate much more rapidly. The increase in watershed cover would improve soil permeability, and decrease runoff and flood occurrences.

Riparian Areas

Riparian and wetland areas would continue to receive heavy grazing pressure under ALTERNATIVE A. Since streams, springs, and meadows are eagerly sought out as sources of shade, water, and succulent forage, the 75 percent of the wetland/riparian areas presently in fair or poor condition would continue to remain in a degraded state. These areas are not only desirable, but also easily accessible. The 25 percent of wetland/riparian areas rated good or better are either fenced, lightly stocked and utilized, or located in steep canyons which hinder entry from the plateaus above. For these reasons the good areas would probably remain in good condition.

In summary, ALTERNATIVE A would result in a gradual, long-term downward trend on 3/4 of the areas wetland/riparian resource, with a static good or better condition rating prevailing on the remainder.

ALTERNATIVE B significantly intensifies many land uses above present rates. This alternative opens all management areas with riparian/wetland resources to wood harvesting, mineral and energy development, and unrestricted ORV use. All of these uses have the potential to adversely impact riparian areas, but the greatest threat comes from proposed forage increases for livestock. This livestock increase is rationalized in light of planned forage production boosts which, regardless of forage availability, will only raise the already high demand on water sources and associated habitat. Greater utilization in these wet areas would inhibit the regeneration of woody vegetation and encourage competition from undesirable, grazing tolerant plant species. Short-term impacts would be insignificant in relation to the long term, since the short-term stocking level increase of seven percent is relatively consistent with the present level in those allotment with appreciable wetland and riparian resources. Projected long-term stocking rates (plus 46 percent) would drastically increase livestock water demands and use on riparian/wetland vegetation. In the long term, old trees and shrubs would die or be removed to accommodate other uses, only to be replaced by unpalatable and undesirable vegetation. In effect, this plan would reduce potentially productive and diverse wetland/riparian areas, which are rare on public land in the RMP area, to single purpose watering holes and canals. Damage after five years would be irretrievable without removal of livestock and even then may be too late due to the loss of site productivity. Long-term impacts due to grazing would be most noticeable in Management Areas 2, 3, 4, 7, 9, 10, and 11.

Proposed livestock increases would adversely affect all 189 acres of wetland/riparian habitat. Over utilization of these wet areas will result in a significant long-term decline in their condition. Impacts from road development, wood harvest, and mineral development tend to be more localized and can only be assessed on a site by site basis, however the most susceptible units are Areas 2, 3, 4, 7, 10, and 11.

ALTERNATIVE C raises both the short and long-term livestock use levels as well as increasing other uses to some extent. Because riparian/wetland areas are highly desirable to all public land users, increased use could result in overuse of these areas. In many instances, though, potential impacts would be mitigated during project and activity planning phases of implementing this alternative. Development of site-specific activity management plans and project plans would allow for the protection of significant riparian/wetland resources, maintaining or improving on current conditions. Improvements in wetland/riparian resources would be subtle and occur over the long term but planned monitoring actions would detect trends indicating improving conditions as well as identifying where conditions are deteriorating and changes in management are needed to satisfy law, policy, and public opinion.

Wetland/riparian resources could also be adversely affected by unrestricted vehicle use, woodland harvest, limited fire suppression, and energy/mineral exploration and development. Again, these activities would be assessed on a site by site basis with mitigation and monitoring utilized as appropriate to reduce or eliminate potential adverse impacts to the riparian/wetland resource.

In summary, ALTERNATIVE C proposes to increase use levels on public lands while complying with laws and policy relative to wetland/riparian resources. The 189 acres of wetland/riparian areas on public land in the Cassia RMP area would remain stable or show slight long-term improvement.

Adoption of ALTERNATIVE D would show long-term improvement in wetland/riparian qualities throughout the planning area. Forage reductions in management areas with significant riparian resources range from 14 to 37 percent but the key to an anticipated riparian resurgence is the over-riding philosophy of this alternative, that of protecting and enhancing renewable resources. For each management area, guidelines have been established that orient management toward better riparian/wetland conditions. If lower livestock numbers did not produce the desired effects, guidance provides for livestock management changes and structural improvements as needed to reach the management objectives of improved riparian conditions.

Wetland/riparian areas presently in poor and fair condition have been abused for a long time and would exhibit a very slow, long-term recovery. Revegetation and mechanical treatment may be a desirable means of speeding up the process on badly depleted sites. In general, ALTERNATIVE D would contribute to improved resource conditions with the best response coming from areas presently in good and fair condition. Areas rated excellent would remain so, and poor condition sites could be rehabilitated if desired, or be protected leaving natural succession to run its course.

SUB ALTERNATIVE D would result in improved riparian conditions as documented in Alternative D. Elimination of livestock use would enable natural succession to run its course, resulting in increased plant vigor and volume within wetland/riparian zones. The vigor of woody vegetation would be enhanced and additional shrubs and trees would likely reestablish. Stream banks currently in a degraded condition would gradually stabilize as the volume of vegetation increased. Sediment problems associated with livestock use along streams would be eliminated. Water quality problems resulting from livestock use would cease. Water quality would improve.

The impacts to riparian areas in terms of vegetation and overall stream quality conditions are portrayed in comparative fashion for all alternatives in Table 4-2.

VEGETATION

Cover

All alternatives would provide an increase in vegetative cover from the existing cover factor of 32 percent (ALTERNATIVE A). However, little difference separates the management options with areawide cover under ALTERNATIVES B, C, and D projected to be 33 percent, and SUB ALTERNATIVE D yielding 34 percent cover. Table 4-3 provides a summary of vegetative cover by management area by alternative. Appendix I explains the methodology used in making cover projections and portrays cover by allotment by alternative.

Condition

At present (ALTERNATIVE A) 30 percent of the rangeland in the RMP area is in good to excellent condition with 70 percent fair to poor. ALTERNATIVE B and C would boost good to excellent condition rangeland to 73 and 67 percent respectively. This improvement in condition comes from acreage that would be

treated to eradicate shrub or brush species thereby enhancing production of native grasses, and the acreage that would be treated to remove brush and then be seeded to grass species palatable to livestock. In either case the condition of these new seedlings or land treatment areas would be good or excellent depending upon the effectiveness of the treatments. ALTERNATIVE D and SUB ALTERNATIVE D would yield 65 and 64 percent good to excellent condition rangeland. This condition improvement stems from lower or no livestock grazing resulting in improvement in the natural (ecologic) potential of the plant community. See Table 4-4 for a summary of condition by management area by alternative. Appendix H provides an explanation of the methodology of projecting range condition and shows condition by allotment by alternative.

Trend

Presently (ALTERNATIVE A) the trend on 16 percent of the rangeland is upward or improving, 56 percent static, and 25 percent downward. The large increases in the acreage rated in excellent and good condition in Alternatives B, C, D, and Sub D would generate a corresponding improvement in range trend (see Table 4-5). The acreage rated in upward trend would increase to 70, 66, and 51 percent respectively for ALTERNATIVES B, C, and D. Under SUB ALTERNATIVE D the trend on 88 percent of the rangeland would be upward. See Appendix G for trend ratings by allotment by alternative and for an explanation of the methodology for making trend projections.

TABLE 4-3

Vegetation Cover Summary

Management Area		Inventoried Federal Acres	Alternative (% of Vegetative Cover)				
No.	Name		A	B	C	D	Sub D
1	Milner	932	34	34	36	35	37
2	Foothills	48,256	31	32	32	32	33
3	West Goose Creek	27,106	31	32	32	32	33
4	Middle Mountain	39,948	29	30	30	30	31
5*	Administrative Site	(19)*	- -	- -	- -	- -	- -
6	East Hills	3,671	30	31	31	32	33
7	Albion	21,205	30	31	31	31	32
8	City of Rocks	17,622	24	25	25	25	26
9	Raft River Valley	105,808	33	34	34	33	35
10	Jim Sage	76,297	26	28	28	28	28
11	Cotterel	40,507	30	32	32	32	32
12	Highway Unit	45,669	36	37	37	37	37
13	Sublett	40,594	43	44	44	44	45
14	Isolated Tracts	1,678	30	30	30	30	31
	Total	469,293					
	Weighted Average		32	33	33	33	34

* Not inventoried -- not included in total

TABLE 4-4

Range Condition by Management Area

Management Area No. Name	Invento- ried Fed. Acres	ALTERNATIVE A								ALTERNATIVE B							
		Condition Class								Condition Class							
		Excellent Acres	%	Good Acres	%	Fair Acres	%	Poor Acres	%	Excellent Acres	%	Good Acres	%	Fair Acres	%	Poor Acres	%
1 Milner	932	0	0	0	0	0	0	932	100	0	0	634	68	0	0	298	32
2 Foothills	48,256	2,218	5	10,833	22	21,133	44	14,072	29	11,571	24	20,403	42	5,167	11	1,115	23
3 West Goose Creek	27,106	1,353	5	4,033	15	19,021	70	2,699	10	9,570	35	9,856	37	6,829	25	851	3
4 Middle Mountain	39,948	915	2	3,214	8	19,583	49	16,236	41	2,680	7	16,748	42	13,300	33	7,220	18
5 Administrative Site (19)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 East Hills	3,671	0	0	1,259	34	649	18	1,763	48	275	7	1,382	38	1,280	35	734	20
7 Albion	21,205	502	2	5,457	26	9,137	43	6,109	29	4,600	22	13,169	62	1,610	8	1,826	8
8 City of Rocks	17,622	1,500	9	2,110	12	4,461	25	9,551	54	3,633	21	4,165	24	4,425	25	5,399	30
9 Raft River Valley	105,808	19,708	19	11,900	11	22,030	21	52,170	49	26,834	25	52,885	50	11,865	11	14,224	14
10 Jim Sage	76,297	1,561	2	22,758	30	19,458	25	32,520	43	28,818	38	44,102	58	130	0	3,247	4
11 Cotterel	40,507	1,181	3	8,114	20	30,228	75	984	2	5,968	15	12,156	30	21,965	54	418	1
12 Highway Unit	45,669	14,110	31	14,211	31	4,924	11	12,424	27	25,936	57	8,987	20	5,992	13	4,754	10
13 Sublett	40,594	251	1	15,669	38	24,012	59	662	2	10,174	25	25,159	62	4,757	12	504	1
14 Isolated Tracts	1,678	0	0	177	11	467	28	1,034	61	78	5	93	6	195	11	1,312	78
Total	469,293	43,299	9	99,735	21	175,103	37	151,156	33	130,137	28	209,739	45	77,515	16	51,902	11

ALTERNATIVE C								ALTERNATIVE D								SUB ALTERNATIVE D								
Condition Class								Condition Class								Condition Class								
Excellent	Good		Fair		Poor			Excellent	Good		Fair		Poor			Excellent	Good		Fair		Poor			
Acres	Acres	%	Acres	%	Acres	%		Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	
0	0		200	21	29	3	703	76	0	0		220	24	712	76	0	0		0	0	220	24	712	76
11,582	24	20,162	42	5,397	11	11,115	23	13,413	28	17,363	36	5,892	12	11,588	24	12,568	26	17,625	37	6,803	14	11,260	23	
9,828	36	9,351	34	6,952	26	975	4	12,001	44	10,969	40	3,401	13	734	3	9,870	36	7,856	29	8,641	32	739	3	
2,755	7	14,861	37	14,514	36	7,818	20	9,582	24	12,922	9	11,616	29	5,828	15	9,147	23	15,091	38	9,745	24	5,965	15	
-	-	-	-	-	-	-	-	-	-	-	32	-	0	-	-	-	-	-	-	-	-	-	-	
275	7	1,366	37	1,280	35	750	21	988	27	1,528	42	494	13	661	18	1,236	34	328	9	1,327	36	780	21	
4,674	22	10,156	48	3,495	16	2,880	14	9,568	45	6,041	28	2,280	11	3,316	16	6,591	31	6,808	32	5,496	26	2,310	11	
3,633	21	3,628	20	4,784	27	5,577	32	6,265	35	4,575	26	3,756	22	3,026	17	3,690	21	4,155	24	6,077	34	3,700	21	
26,834	25	41,526	40	19,496	18	17,952	17	35,644	34	25,127	24	18,846	17	26,191	25	30,258	29	15,740	15	24,479	23	35,331	33	
28,818	38	37,319	49	130	0	10,030	13	47,706	62	1,975	3	25,561	34	1,055	1	28,843	38	19,211	25	1,627	2	26,616	35	
6,208	15	1,816	29	22,065	55	418	1	10,848	27	6,188	15	22,923	57	548	1	9,871	24	27,567	68	2,939	7	130	1	
25,936	57	8,987	20	5,992	13	4,754	10	27,251	60	7,499	16	6,367	14	4,552	10	29,370	64	5,572	12	5,979	13	4,748	11	
11,065	27	23,733	59	5,292	13	504	1	20,675	51	15,874	39	3,541	9	504	1	30,938	76	7,911	20	1,745	4	0	0	
78	5	63	4	195	11	1,342	80	78	5	63	4	195	11	1,342	80	78	5	260	15	604	36	738	44	
131,686	28	183,168	39	89,621	19	64,818	14	194,019	41	110,344	24	105,585	22	59,345	13	172,458	37	128,124	27	75,682	16	93,029	20	

* Not inventoried -- not included in totals

TABLE 4-5
Range Trend by Management Area

Management Area No. Name	Invento- ried Fed. Acres	A L T E R N A T I V E A						A L T E R N A T I V E B					
		Up		Static		Down		Up		Static		Down	
		Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
1 Milner	932	0	0	680	73	252	27	634	68	0	0	298	32
2 Foothills	48,256	3,670	7	28,860	60	15,726	33	38,928	81	9,155	19	173	0
3 West Goose Creek	27,106	8,935	33	10,343	38	7,828	29	20,503	76	6,603	24	0	0
4 Middle Mountain	39,948	7,339	18	26,756	67	5,853	15	20,225	51	16,336	41	3,387	8
5 Administrative Site	(19)	-	-	-	-	-	-	-	-	-	-	-	-
6 East Hills	3,671	0	0	2,655	72	1,016	28	1,668	45	1,496	41	507	14
7 Albion	21,205	1,947	9	14,703	69	4,555	22	15,321	72	5,758	27	126	1
8 City of Rocks	17,622	1,034	6	11,666	66	4,922	28	3,698	21	10,035	57	3,889	22
9 Raft River Valley	105,808	14,733	14	48,623	46	42,452	40	69,982	66	28,550	27	7,276	7
10 Jim Sage	76,297	5,313	7	45,857	60	25,127	33	74,999	98	1,298	2	0	0
11 Cotterel	40,507	4,291	10	34,326	85	1,890	5	16,193	40	24,314	60	0	0
12 Highway Unit	45,669	19,008	42	21,034	46	5,627	12	35,744	78	8,602	18	1,323	4
13 Sublett	40,594	11,383	28	29,211	72	0	0	29,392	72	11,202	28	0	0
14 Isolated Tracts	1,678	78	5	561	33	1,039	62	108	6	434	26	1,136	68
Total	469,293	77,731	16	275,275	59	116,287	25	327,395	70	123,783	26	18,115	4

A L T E R N A T I V E C						A L T E R N A T I V E D						S U B A L T E R N A T I V E D					
Up		Static		Down		Up		Static		Down		Up		Static		Down	
Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
200	21	211	23	521	54	0	0	220	24	712	76	932	100	0	0	0	0
38,822	81	9,261	19	173	0	37,006	77	11,077	23	173	0	45,749	95	2,334	5	173	0
20,310	75	6,796	25	0	0	18,972	70	8,134	30	0	0	25,493	94	1,613	6	0	0
18,400	46	18,112	45	3,436	9	11,730	29	23,156	58	5,062	13	38,981	98	942	2	25	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,652	45	1,496	41	523	14	1,227	33	1,596	43	848	23	3,471	95	145	4	55	1
12,855	61	7,842	37	508	2	8,871	42	10,243	48	2,091	10	20,657	97	528	3	20	0
2,876	16	10,802	61	3,944	23	1,602	9	11,970	68	4,050	23	14,503	82	1,904	11	1,215	7
65,182	62	32,166	30	8,460	8	40,586	38	51,188	48	14,034	14	80,810	76	21,864	21	3,134	3
68,402	90	7,895	10	0	0	49,118	64	27,179	36	0	0	72,803	95	3,097	4	397	1
16,093	40	24,414	60	0	0	12,580	31	27,797	69	130	0	38,408	95	2,099	5	0	0
35,744	78	8,602	18	1,323	4	34,209	75	10,747	24	713	1	30,937	68	14,732	32	0	0
28,628	71	11,966	29	0	0	25,103	62	15,491	38	0	0	40,331	99	263	1	0	0
78	5	434	26	1,166	69	78	5	434	26	1,166	69	440	26	389	23	849	51
309,242	66	139,997	30	20,054	4	241,082	51	199,232	43	28,979	6	413,515	88	49,910	11	5,868	1

* Not inventoried -- not included in totals

Threatened or Endangered Species

Fleabane (*Erigeron latus*) was the only species identified in the Cassia Threatened and Endangered Plant inventory that is currently under review for consideration as threatened or endangered. Because of its habitat location the only proposal for vegetation change identified in the RMP area that would affect the well-being of fleabane is herbicide treatment and nothing is proposed for its habitat type. Therefore, no impact on the plant is expected.

WOODLAND RESOURCES

Post/Firewood

There are 100,803 acres of woodland in the RMP area (Map 3-6). The following table indicates how much of this woodland resource is available for harvest under each of the resource management alternatives.

	Alternative				
	A	B	C	D	Sub D
Acres Open to Harvest	60,035	100,803	97,803	22,658	22,658
Percent Open to Harvest	59	100	97	22	22
Sustained-Yield Harvest (cords)	3,056	5,132	5,132	1,153	1,153

All alternatives would meet the projected 1990 public demand of 1,000 cords per year. To actually achieve the projected harvest for ALTERNATIVES B and C, easements to public land would be needed and access roads would have to be constructed. The vegetative conversions provided for in ALTERNATIVES B and C would increase grass production for livestock, but would eliminate 27,334 acres of juniper, lowering the sustained yield harvest for these alternatives to 3,740 cords per year.

Pinyon Pine Christmas Trees

The abundance of pinyon pine on 1,440 acres southeast of the city of Almo is such that the area is suitable for the harvest of pinyon pine for Christmas trees. The following table indicates how Christmas tree harvest in this area would be managed under each of the alternatives.

	Alternative				
	A	B	C	D	Sub D
Acres Open to Harvest	1,015	1,440	1,015	0	0
Percent Open to Harvest	70	100	70	0	0
Sustained-Yield Harvest (trees)	520	750	520	0	0

ALTERNATIVES A, B, and C would be consistent with sustained-yield management. There is great public demand for Christmas trees in the planning area. None

of the alternatives has the capability of satisfying all of the public demand for pinyon Christmas trees.

ALTERNATIVE D and SUB ALTERNATIVE D close the entire pinyon pine area to Christmas tree cutting due to recreational and historical values in this area. This would not help meet any of the public demand for pinyon Christmas trees. However, this action is an attempt to preserve the largest concentration of pinyon pine in Idaho and one of the furthest north stands in the U. S.

WILDLIFE

Big Game - Mule Deer and Antelope

Under ALTERNATIVE A all 78,280 acres of yearlong antelope habitat would be open to energy resource leasing. If energy development occurs, which is unlikely, unavoidable impacts such as increased harassment and a loss of some food and cover would occur. Similar impacts would occur on mule deer range though standard lease stipulations provide some protection on crucial ranges.

Grazing management would continue to impact big game. To support livestock grazing 58,316 AUMs are needed. Competition for forage between wildlife and livestock would have the most impact within crucial deer winter range where fall or winter grazing by livestock would remove food needed by mule deer. During late season grazing, livestock shift to browse species as grasses and forbs dry, mature, and lose their nutritional value. This can reduce the carrying capacity of deer winter range becoming a limiting factor with respect to herd productivity. Approximately 67,000 acres (92%) of crucial winter range is grazed at some time of the year with about 54,100 acres (74%) being grazed for some period of time between October 1 and February 28. (See Table 4-8.)

Fire management within the RMP area includes maximum suppression, limited suppression, and prescribed burning. Each practice has good application for wildlife if properly administered. In general, less thorough, intensive burns can provide large increases of herbaceous and browse plant species favored by deer. Maximum suppression would cause some resource damage as wildlife food and cover are eliminated when dozers are used to clear fire lines. Limited suppression would also adversely impact big game range if fires of 500 acres or more are allowed to burn without maintaining at least 25 percent of the vegetation within the burn as a wildlife leave area.

Approximately 33,579 acres have been identified for transfer out of federal ownership under ALTERNATIVE A. About 3,000 acres are within mule deer winter habitat and 8,100 acres are with antelope habitat. Transferring this acreage into private ownership would remove two percent of the deer winter range and 10 percent of the antelope habitat in the RMP area. This can be viewed as a permanent adverse, irreversible impact, though its significances would be minor.

In ALTERNATIVE A, 58 percent of the area is open to ORV use. All of the crucial deer winter range would be closed to ORV use from December through April. This seasonal closure will benefit mule deer by eliminating harassment

during the winter months when animal energy reserves are low and additional stress can result in increased mortality.

Firewood, post, and pole cutting will have mixed impacts on big game. In those dense islands of juniper with very little understory, removal of some trees would provide for a better understory of preferred wildlife food plants. Removal of woodland products would have the most adverse impact on deer in identified migration routes (Management Areas 7, 8, 10, 13) by removing thermal cover needed to maintain body condition and temperature.

In summary, ALTERNATIVE A would maintain big game at present levels. A total of 10,089 AUMs of forage is needed to support the existing mule deer and antelope population. Forage needed to meet projected 1995 big game populations is estimated to be 14,315 AUMs. This long-term forage need would not be met.

Under ALTERNATIVE B wildlife receives only minimal consideration. The planning area is open to energy resource leasing regardless of the wildlife values present. At the present time oil and gas and geothermal leases cover approximately 371,067 acres (78 percent) of the RMP area. Standard stipulations are generally added to a lease to provide some protection for big game during crucial times of the year. Should large scale energy development occur, one unavoidable adverse effect is the increased harassment of big game that results from the additional roads needed to support oil and gas facilities. New roads bring people into areas previously inaccessible by vehicle. This results in increased disturbance and possible displacement of animals. These effects are most critical during seasons when young are born and during winter. In addition, increased disturbance can also displace animals from areas of vital shelter and food resources. These are factors that can limit big game population growth.

Fire management within the area includes maximum suppression, limited suppression, and prescribed burning. Impacts would be similar to those described under Alternative A. Given this alternative's underlying philosophy of maximizing livestock production on the public land, prescribed fire would be oriented toward increasing livestock forage. For maximum livestock benefit prescribed fires must be intense (hot) and clean burning in nature, whereas wildlife burns are usually less intense and spotty. Hence, big game needs would not be met by the application of prescribed burning for the purpose of increasing livestock forage.

Livestock grazing would have the greatest adverse impact on big game. A maximum of 85,268 AUMs of livestock forage are needed in this alternative (refer to Table 4-11). To provide this forage a total of 117,930 acres of native vegetation, or 25 percent of the RMP area, would be seeded, sprayed, or burned. Almost all of the treatment is within some portion of big game winter habitat. About 35 percent of deer winter range would be treated (Table 4-6). About 25 percent of antelope range lies within the proposed land treatment areas (Table 4-7).

Because of non-wildlife oriented management objectives, treatment areas seeded principally to grass would be of little value to mule deer except as early spring forage. Such treatments would reduce deer use through loss of cover and winter forage. Because of their preference for a diverse forb diet, antelope prefer the less successful seedings and new seedings that do not contain pure stands of grass.

TABLE 4-6

Proposed Land Treatments in Mule Deer Winter Range

Management Area No. Name	Total Deer Winter Range	A L T E R N A T I V E B			A L T E R N A T I V E C		
		Acres Land Treatment Proposed	Acres of Deer Range Treated	Percent of Range Treated	Acres Land Treatment Proposed	Acres of Deer Range Treated	Percent of Range Treated
1 Milner	0	634	0	0	200	0	0
2 Foothills	33,136	5,059	3,379	10	3,900	2,605	8
3 West Goose Creek	10,320	2,869	1,894	18	1,736	1,136	11
4 Middle Mountain	15,041	8,669	5,299	35	6,670	4,080	27
5 Administrative Site	0	0	0	0	0	0	0
6 East Hills	2,708	441	435	16	425	417	15
7 Albion	3,815	11,056	1,689	44	6,528	996	26
8 City of Rocks	9,276	2,096	921	10	1,274	562	6
9 Raft River Valley	937	43,125	231	30	29,755	194	21
10 Jim Sage	36,164	27,914	15,589	44	19,825	11,068	31
11 Cotterel	18,606	5,509	2,764	15	3,900	1,962	11
12 Highway	0	1,988	0	0	1,988	0	0
13 Sublett	25,725	8,540	4,019	16	5,975	2,813	11
14 Isolated Tracts	0	30	0	0	0	0	0
Total	155,731	117,930	55,153	35	82,176	25,833	17

TABLE 4-7

Proposed Land Treatments in Antelope Range

Management Area No. Name	Total Antelope Range	A L T E R N A T I V E B			A L T E R N A T I V E C		
		Acres Land Treatment Proposed	Acres of Antelope Range Treated	Percent of Range Treated	Acres Land Treatment Proposed	Acres of Antelope Range Treated	Percent of Range Treated
9 Raft River Valley	36,445	43,125	17,030	36	29,755	8,991	25
10 Jim Sage	3,327	27,914	3,123	94	19,825	2,217	67
11 Cotterel	4,949	5,509	1,042	21	3,900	726	15
12 Highway	33,304	1,988	1,988	6	1,988	1,988	6
13 Sublett	255	8,540	255	100	5,975	130	51
Total	78,280	87,076	19,438	25	61,443	14,052	18

Competition for forage between wildlife and livestock would be most severe on crucial deer winter ranges where fall or winter grazing would remove needed food for mule deer. Approximately 67,000 acres (92%) of crucial winter range is grazed at some time of the year with about 53,600 acres (73%) proposed for some grazing use between October 1 and February 28 when mule deer are dependent on the winter range for forage. ALTERNATIVE B would intensify fall-winter competition for forage between mule deer and cattle because of the 46 percent long-term increase in livestock use that is proposed for the 19 allotments listed in Table 4-8, though on over two-thirds of the allotments involved this competition would occur for one month or less. Also, only 30 percent of the total acreage within the involved allotments is crucial deer winter range. Still important wildlife browse species would be overutilized, causing a decline in carrying capacity as evidenced by reduced browse production and vigor.

There have been 15,550 acres identified for transfer. About 4,500 acres are within deer winter range and 1,800 acres in antelope range. Transferring this

TABLE 4-8

Season of Use Conflicts on Crucial Deer Winter Range

Allotment No. Name	Acres Crucial Deer Winter Range/ % of Allotment	Season of Use	
		Current (Alt. A)	Proposed (Alt. B, C, D)
4027 Goose Creek Group	4,686/16	5/1 - 10/31	5/1 - 10/31
4032 Dry Creek-Artesian	1,603/49	5/4 - 5/31	5/4 - 5/31
		11/1 - 12/1	11/1 - 12/1
4067 Buckhorn-Churchill	1,609/20	10/25 - 11/4	14/16 - 5/25
		11/13 - 11/30	10/25 - 11/30
4093 Goose Creek-Poulton	6,088/100	5/15 - 5/30	5/15 - 5/30
		10/23 - 11/15	10/23 - 11/15
4094 Churchill-Poulton	199/5	4/15 - 5/14	4/15 - 5/14
		12/15 - 1/14	12/15 - 1/14
4104 Baker	1,748/66	5/15 - 5/30	5/15 - 5/30
		10/23 - 11/15	10/23 - 11/15
4015 Day	222/64	5/15 - 5/30	5/15 - 5/30
		10/23 - 11/15	10/23 - 11/15
4117 Goose Creek Private #1	785/33	5/16 - 5/31	5/1 - 8/1
		7/16 - 8/18	8/1 - 10/31
5002 South Cotterel	6,392/22	5/1 - 11/30	5/1 - 11/30
5003 Jim Sage	21,799/33	4/1 - 12/5	4/1 - 12/5
5004 Cassia Creek	685/18	5/1 - 6/15	5/1 - 6/15
		9/1 - 9/30	10/16 - 11/15
5005 Almo-Womack	173/4	5/1 - 6/15	5/1 - 6/15
		10/16 - 11/15	10/16 - 11/15
5011 Pine Knob	167/42	6/1 - 11/15	6/1 - 11/15
5035 Sparks Basin	1,480/77	5/16 - 11/15	5/16 - 10/30
5036 Junction Seeding	1,988/30	5/1 - 5/31	5/1 - 5/31
		10/1 - 10/31	10/1 - 10/31
5313 Chapin	912/35	12/3 - 1/30	12/3 - 1/30
5314 Dairy Springs	1,091/12	5/1 - 10/7	5/1 - 10/18
5321 Antelope	1,242/34	5/1 - 10/30	5/20 - 11/19
5323 North Lake Fork	734/60	9/16 - 10/31	6/15 - 9/30
5325 Sublett	141/19	7/1 - 10/30	7/1 - 10/30
5327 Meadow Creek	1,248/9	5/14 - 10/21	6/15 - 9/15
Total Crucial Deer Winter Range on Allotments with Grazing Conflicts (acres)		54,143	53,631
Total Crucial Deer Winter Range (acres)		72,953	72,953
Percent Crucial Winter Range Adversely Affected		74%	73%
Total Allotment Acreage/Percent of Total Acreage that is Crucial Range		192,837/28%	180,230/30%

acreage into private ownership would remove three percent of deer winter habitat and two percent of antelope habitat, an insignificant impact.

The RMP area is open to all vehicles with few exceptions. This will affect about 88 percent of the deer winter range. Use of snow machines on public lands, though, is limited due to snow conditions. Thus, impacts would be minor in deer winter areas. Undue harassment by off-road vehicles at any season of the year would increase stress on the animals, having the long-term effect of lowering individual animal condition and deer herd production.

The protective measures placed on critical floodplains in Management Sub Area 9b would be beneficial to antelope. By not allowing surface disturbing activities to take place within the floodplains, food and cover for antelope would reestablish.

Removal of woodland products by the public for firewood and posts would have a minor beneficial impact on big game. This would be the case in closed juniper stand with little understory vegetation. Removal of juniper would enable the regeneration of nutritious, desired wildlife food plants. Removal of woodland products in identified migration routes (Management Areas 7, 8, 10, 13) would adversely affect deer through the removal of thermal cover needed to maintain body condition and temperature.

The resource management objectives under ALTERNATIVE C are, for the most part, generally favorable toward big game.

The underlying philosophy of ALTERNATIVE C is balanced use. Under this management concept mule deer would fair well even though 17 percent of deer winter range is proposed for some kind of land treatment (Table 4-6). To achieve balanced use, land treatments would be designed with both livestock and wildlife in mind. The goal would be to achieve a mix of vegetation with grassy regions interspersed with areas of dense brush or woodland and open shrubs. Important areas of hiding, winter, or escape cover such as ridgetops and draws would be avoided. Such an approach to vegetative treatment would increase habitat diversity, providing deer with a greater opportunity to select the most favorable forage under a variety of situations. This could increase winter range carrying capacity, increasing the likelihood that projected 1995 mule deer population levels would be met.

Approximately 18 percent of yearlong antelope range is proposed for land treatment (Table 4-7). Under the balanced use concept of ALTERNATIVE C, land treatments resulting in a vegetative community of mixed grass, forbs, and browse would improve the carrying capacity of antelope range and lessen forage competition with livestock. The increased carrying capacity on this treatment acreage would help assure that projected 1995 population levels would be met.

Table 4-8 identifies where mule deer-livestock competition on crucial deer winter range would occur under ALTERNATIVE C. However, the proposed land treatments in mule deer winter range would provide the additional forage to support both wildlife and livestock increases. This forage increase would reduce the utilization on browse species and would eliminate much of the mule deer-livestock competition on crucial deer winter range. As under Alternative B, most of the competitive use would be limited to one month or less of the crucial fall-winter period and only 30 percent of the acreage in the allotments involved is considered crucial winter range.

It is unlikely that wheeled or over snow vehicle use would affect big game use on winter range. ORV use would be limited due to snow conditions. Most snow machine use occurs on the U.S. Forest Service lands, thus little winter range is being affected. If snow machine use were to increase the potential for overflow onto the winter range is possible. Use levels, however, are not expected to increase significantly over the next ten years.

Out of the 11,652 acres of land that has been identified for disposal only about two percent is in mule deer winter range and about two percent is located in antelope range. This is such a small percent the impacts to big game habitat would be insignificant.

Removal of woodland products by the public for firewood and posts will yield the beneficial impacts described in Alternative B. Deer migration routes have been closed to harvest, protecting the thermal cover present in these areas.

Under ALTERNATIVE D steps have been taken to consider the well being of big game. Forage would be appropriated to provide for projected 1995 mule deer and antelope populations (14,315 AUMs). All deer winter range and yearlong antelope range would be maintained or improved. Forage competition between livestock and deer on crucial deer winter range would be reduced or eliminated because of an 18 percent reduction in livestock use on those 19 allotments containing crucial deer winter range and which would be grazed during the fall-winter period. Other resource activities such as energy resources development, minerals development, ORV use, and the harvest of woodland products in migration routes, would be restricted through seasonal closures, limited use, or would be closed. Limited suppression fire management, called for on 437,511 acres, would have an adverse impact on big game ranges if fires of 500 acres or more are allowed to burn without the provision of leave areas. Big game numbers would increase and long-term (1995) population levels would be attained.

Mule deer and antelope would benefit greatly under SUB ALTERNATIVE D. No livestock grazing would eliminate competition between livestock and big game for food, cover, and water. This would provide needed forage in crucial deer winter ranges and in yearlong antelope range. Big game numbers would increase and long-term (1995) population levels would be met.

Upland Game

All of the area is open to energy resource leasing under ALTERNATIVE A with the exception of 2,055 acres in the Milner area. However, seasonal closures on 88 percent of the area would benefit upland game, especially sage grouse, by providing undisturbed nesting conditions.

Fire management within the area includes maximum suppression, limited suppression, and prescribed burning. Under the right management techniques upland game habitat development can be accomplished. Prescribed burning would be the most beneficial to upland game. The most detrimental short-term impact to upland game would be from an early season fire burning through an occupied nesting area. Limited suppression would also have an adverse impact on upland game if fires larger than 500 acres are allowed to burn without providing adequate leave areas.

Effects on sage grouse deserve special attention since this species would be affected the most. Livestock grazing would not allow sage grouse habitat and populations to improve. A rapid removal of forbs by livestock on spring and summer ranges would have an adverse impact on juvenile sage grouse, especially in those areas where forbs are scarce.

All of the 33,579 acres identified for transfer are within the habitat of one species of upland game or another. Disposal of these lands would have the potential of removing these acres from upland game production depending on what use occurs on the land after disposal. Approximately 49 percent of the transfer acres are within sage grouse habitat.

In this alternative 58 percent of the area is open to wheeled ORV use. Within this open area, the lack of ORV restrictions could adversely affect crucial sage grouse areas, such as strutting grounds and nesting areas, and other upland game habitat.

Under this alternative 60 percent of woodland habitat is open to the harvest of firewood and posts. Approximately 92 percent of the woodland stands are within sage grouse habitat. This would cause an adverse impact in the spring if wood cutting is allowed to take place in nesting areas.

Under ALTERNATIVE B there are no management objectives or required actions that would benefit upland game. This alternative falls short of providing protection for cover, nesting, and brood-rearing areas.

The entire area is open to leasing under energy resources. At the present time about 78 percent is already under oil and gas and geothermal lease. Stipulations may be added, in some cases, to provide some protection. If some of these leases are developed, any amount of disturbance will have adverse impacts on upland game. Development is unlikely under current conditions.

Impacts from fire management would be similar to those described in Alternative A.

The proposed livestock grazing program would adversely affect upland game. Impacts primarily center on sage grouse. Approximately 35 percent of the sage grouse habitat is scheduled for some kind of land treatment to increase the production of livestock forage (Table 4-9). With such a large percentage of habitat scheduled for treatment, the present downward trend in sage grouse numbers would not be reversed and likely could be accelerated. Impacts would depend on the percent kill of brush and the location and distribution of leave areas. However, given this alternative's emphasis on maximizing livestock forage production, it is unlikely that land treatments would be designed around the needs of sage grouse. Carrying capacity, degree of stress, and grouse displacement would subsequently be influenced. Sagebrush provides cover and food for sage grouse and is the mainstay for their survival. If land treatments were maintained to preclude the reinvasion of sagebrush, one out of three acres of productive sage grouse habitat would be permanently lost. This impact may be viewed as long term and irreversible.

Additional livestock use would result in increased trampling or desertion of upland game bird nests. Sage grouse brood-rearing conditions would decline as increased livestock would remove a greater portion of succulent forbs on dry-land range during the spring and early summer. The concentration of livestock

TABLE 4-9

Proposed Land Treatments in Sage Grouse Habitat

Management Area No. Name	Total Sage Grouse Habitat	ALTERNATIVE B			ALTERNATIVE C		
		Acres Land Treatment Proposed	Acres of Sage Grouse Habitat Treated	Percent of Habitat Treated	Acres Land Treatment Proposed	Acres of Sage Grouse Habitat Treated	Percent of Habitat Treated
1 Milner	0	634	0	0	200	0	0
2 Foothills	28,015	5,059	3,651	13	3,900	2,811	10
3 West Goose Creek	20,020	2,869	2,548	13	1,736	1,529	8
4 Middle Mountain	32,476	8,669	7,543	23	6,670	5,808	18
5 Administrative Site	0	0	0	0	0	0	0
6 East Hills	0	441	0	0	475	0	0
7 Albion	15,629	11,056	10,493	67	6,528	6,191	40
8 City of Rocks	11,818	2,096	1,558	13	1,274	950	8
9 Raft River Valley	61,763	43,125	31,749	51	29,755	21,913	35
10 Jim Sage	58,893	27,914	27,786	47	19,825	19,728	33
11 Cotterel	17,721	5,509	5,509	31	3,900	3,911	22
12 Highway	0	1,988	0	0	1,988	0	0
13 Sublett	32,885	8,540	7,234	22	5,975	5,063	15
14 Isolated Tracts	0	30	0	0	0	0	0
Total	279,220	117,930	98,081	35	82,176	67,904	24

on wet meadows and riparian areas would increase, depleting the supply of forbs and insects so critical to young sage grouse.

All of the 15,638 acres identified for transfer are within the habitat of one species of upland game or another. Disposal of these lands would have the potential of removing these acres from upland game production depending on what the individual does with the land after he acquires it. Approximately 56 percent of the transfer acres are within sage grouse habitat, three percent of total sage grouse habitat.

In this alternative 88 percent of the RMP area is open to wheeled vehicles. This would adversely affect all species of upland game, particularly in the nesting season when vehicles would either physically destroy nest sites or cause nesting birds to leave nests unattended for long periods of time or permanently abandon them.

The restrictions placed on surface disturbing activities in critical floodplains (Management Sub Area 9b) would have a positive impact on all upland game. By excluding surface disturbing activities within the floodplains, food and cover would be increased.

All of the woodland habitat area is open to harvest. Impacts would be similar in nature to those described in Alternative A, although the magnitude of the impact would be greater because of 40 percent more habitat open to harvest.

The effects of ALTERNATIVE C on upland game would be mixed. One of the management objectives of ALTERNATIVE C is to maintain sage grouse winter and brood-rearing habitat. To accomplish this objective on the 24 percent of sage grouse habitat scheduled for land treatment (Table 4-9), a seed mixture including appropriate forb species would be used to increase forb production and leave areas would be designed to provide adequate areas of sagebrush cover. The opening up and seeding of forbs into tall, dense (40 percent or greater canopy cover) sagebrush sites with little understory would improve the range for the benefit of grouse. Regardless of the land treatment method (burning, chaining, etc.), if a diversity of useable habitat is created and forb production is stimulated, the present decline in sage grouse could be halted. The edge effect created by land treatment would also provide a better mix of food and cover for a variety of other upland game species such as chukar and Hungarian partridge.

Improvement in sage grouse habitat provided by land treatments would offset the additional livestock use on wetland/riparian areas. Under proper livestock management and additional forage the 189 acres of wetland/riparian areas would not be significantly affected.

Slightly more than half of the area would be open to off-road vehicles. Low levels of use by off-road vehicles throughout the RMP area would result in only slight impacts to upland game habitat.

Out of the 11,652 acres of land that has been identified for disposal only about three percent of the sage grouse habitat would be affected. This acreage is a small percentage of the sage grouse range and would result in an insignificant loss of habitat.

All upland game would benefit from ALTERNATIVE D. Sage grouse, Hungarian partridge, and chukar populations would increase over the short term (5-10 years) as a result of improved nesting and brood-rearing cover due to a 23 percent decline in livestock grazing. Other uses or activities such as energy and minerals development, ORV use, and woodland product harvesting would be restricted through seasonal closures, limited use, or would be closed.

SUB ALTERNATIVE D would have a positive impact on upland game over the short term (5-10 years). The lack of grazing would provide necessary food and cover particularly in the spring for nesting and brood-rearing. Over the long term (10-20 years) the impact of no grazing would be adverse. Without livestock grazing the vegetation that is used by upland game could become overgrown, dense, and unuseable for nesting.

Threatened, Endangered, and Sensitive Wildlife

Under ALTERNATIVE A provisions have been made through the statewide RMP guidelines for the protection of threatened or endangered wildlife. Species listed as sensitive by the State of Idaho would receive project specific protection via mitigating measures. Management objectives provide for the protection of ferruginous hawks from human disturbance. Hence, threatened, endangered, and sensitive species would not be adversely affected by this alternative.

Under ALTERNATIVE B provisions have been made through the statewide RMP guidelines for the protection of threatened or endangered wildlife. No management objectives have been provided to enhance sensitive species habitat. Livestock grazing over the long term (10-20 years) would increase about 46 percent. Treating an additional 117,930 acres would reduce food, cover, and general habitat for a number of sensitive terrestrial species, most notably bobcat, sharp-tailed grouse, and ferruginous hawks. Approximately 57 percent (49,410 acres) of ferruginous hawk habitat is within proposed land treatment areas. The long-billed curlew and burrowing owl would benefit from the land treatment projects because they require a more open grass type situation. However, the population or variety of prey species relied on by ferruginous hawks, curlew, and burrowing owls would be reduced. Opening up the area to mineral leasing, off-road vehicle use, and wood cutting would also have an adverse impact, particularly in the spring when mammal offspring are born or birds are nesting. Additional activity associated with these land uses could cause abandonment or destruction of offspring or nest sites.

Under ALTERNATIVE C provisions have been made through the statewide RMP guidelines for the protection of threatened or endangered wildlife. Potential adverse affects of land treatment projects would be reduced through mitigation during project planning (buffer zones around ferruginous hawk nest sites, wildlife leave areas to supply food and cover, etc.). Such mitigation would insure that an ample amount of brush (food and cover) is left to support jack rabbit and rodent populations which are the main food source for the ferruginous hawk. Providing buffer areas and wildlife leave areas would also benefit other sensitive species such as the bobcat and sharp-tailed grouse. The long-billed curlew and burrowing owl would also benefit from proposed land treatment projects. They require a more open grass type situation which the land treatment projects would provide.

Under ALTERNATIVE D provisions have been made through the statewide RMP guidelines for the protection of threatened or endangered wildlife. Priority will be given to habitat protection. Since forage availability generally increases under ALTERNATIVE D all of the sensitive species would benefit. Due to improved habitat conditions the prey base for raptor species would increase. Ground nesting species such as the long-billed curlew would benefit due to the reduced livestock numbers. There would still be sufficient grazing to maintain open areas for long-billed curlew and burrowing owls. Other resource activities such as energy resources development, minerals development, ORV use, and woodland product harvesting are restricted through seasonal closures, limited use, or are closed. This would result in beneficial impacts to sensitive species.

Impacts to sensitive species from SUB ALTERNATIVE D would be mixed. The ferruginous hawk would benefit. No livestock grazing would increase food and cover for rodents, the primary food source or prey base of the ferruginous hawk. Other species such as the burrowing owl and curlew that require open grassland would be adversely affected. No livestock use would allow the vegetation to become tall and rank within the range of these species, resulting in unsuitable habitat.

Aquatic Wildlife Habitat

A continued decline in aquatic wildlife habitat would result under ALTERNATIVE A, but to a lesser degree than Alternatives B and C. The decrease in habitat condition due to continued concentration of livestock, off-road vehicle use, wood cutting, and mineral leasing would have an adverse affect on streams and waterfowl nesting areas. Waterfowl nest density and nesting success are both a function of the quantity and quality of nesting cover. Uncontrolled resource activities along or in riparian areas adversely impacts the composition and density of native stream bank and marsh vegetation (nesting cover).

Fisheries would be adversely affected. Stream bank erosion would continue which, in turn, would lead to increased sedimentation in the streams. Pools would decrease in size and number, and water temperature would increase. Spawning areas would also be reduced.

ALTERNATIVE B would accelerate the decline in aquatic habitat due to increased concentrations of livestock along streams and from increased sediment coming from proposed land treatments adjacent to streams. The decrease in habitat condition due to livestock numbers, unrestricted off-road vehicle use, wood cutting, mineral leasing, and land treatment would have an adverse effect on

streams and waterfowl nesting areas. Waterfowl nest density and nesting success are functions of the quantity and quality of nesting cover.

Of the 20.5 miles of streams that have been or are potentially productive fisheries, 8.6 miles (42%) will be adversely affected by land treatment. Stream bank erosion would continue which, in turn, would lead to increased sedimentation in the streams. Pools would decrease in size and number and water temperature would increase.

ALTERNATIVE C would have impacts similar to Alternative B, but to a lesser degree. Proposed land treatment should produce the needed forage to support the additional livestock. Livestock management systems would provide some rest along streams, thus producing improvement in stream side conditions. Fisheries and water fowl habitat would show limited improvement.

Aquatic wildlife would benefit under ALTERNATIVE D. Assuming structural means are available to implement the management objectives of this alternative, improved riparian habitat conditions could be expected. Waterfowl would benefit from increased nesting cover along streams. Increases in streamside vegetation coupled with a decrease in unstable stream banks would improve fish spawning and pool areas. Improved water quality, particularly from decreased sedimentation, and lower water temperatures resulting from an increased brush canopy should increase trout numbers. If structural means are not implemented or intensive livestock management systems are not designed around the primary objective of improving aquatic habitat for fish and wildlife, present aquatic habitat conditions can be expected to worsen.

Under SUB ALTERNATIVE D aquatic habitat would improve. More watershed cover would lessen the sediment load in streams. Streambank cover would increase, resulting in stabilized streambanks. The overall improvement in water quality would produce a better fishery in most of the streams. Removal of livestock grazing would result in significant increases in waterfowl nesting cover.

Changes in stream condition class and fisheries potential for each alternative are portrayed in Table 4-10.

TABLE 4-10
Stream Condition Class and Fisheries Potential

Stream	Miles of Stream	Species of Trout	Alternative A		Alternative B		Alternative C		Alternative D		Sub Alternative D	
			Condition Class	Fisheries Potential	Condition Class	Fisheries Potential	Condition Class	Fisheries Potential	Condition Class	Fisheries Potential	Condition Class	Fisheries Potential
Birch Creek	2.9	Brook	Fair	Fair	Poor	Poor	Fair	Fair	Good	Good	Good	Good
Cold Creek	7.0	Brook Cutthroat Rainbow	Fair	Fair	Poor	Poor	Fair	Fair	Good	Good	Excellent	Good
Dry Creek	4.1	Cutthroat	Good	Good	Fair	Fair	Good	Good	Excellent	Excellent	Excellent	Excellent
East Fork	1.1	Cutthroat	Good	Good	Fair	Fair	Good	Good	Excellent	Excellent	Excellent	Excellent
Middle Fork	1.7	Cutthroat	Good	Good	Fair	Fair	Good	Good	Excellent	Excellent	Excellent	Excellent
Cassia Creek	.8	Cutthroat Brook	Fair	Fair	Poor	Poor	Fair	Fair	Good	Good	Excellent	Excellent
Goose Creek	2.4	Brook	Poor	Poor	Poor	Poor	Poor	Poor	Fair	Fair	Good	Fair
Howell Creek	1.2	Brook	Fair	Fair	Poor	Poor	Fair	Fair	Good	Good	Excellent	Good
Land Creek	.1	Brook	Poor	Fair	Poor	Poor	Poor	Fair	Fair	Good	Good	Good
Willow Creek	.2	Rainbow	Good	Good	Fair	Fair	Good	Good	Excellent	Excellent	Excellent	Excellent

Total Miles of Stream 20.5

LIVESTOCK MANAGEMENT

Proposed Forage Use

Forage would initially be assigned without any land treatment. Tables 1, 2, and 3 in Appendix A summarized in Table 4-11, display the stocking levels by allotment by management area. The initial stocking level for ALTERNATIVES B and C represents a seven percent increase over the six year (1976-1981) average actual use. The initial and long-term stocking level for ALTERNATIVE D is a 23 percent decrease from the six year average use. As funding enables land treatments to be initiated, additional forage would be assigned according to Tables 2-4 and 2-6, summarized in Table 4-11. Land treatments account for a 23,118 AUM increase under ALTERNATIVE B and a 15,958 AUM increase under ALTERNATIVE C. Long-term stocking levels, as measured from the six year average actual use, would increase 46 percent under ALTERNATIVE B and 34 percent under ALTERNATIVE C.

TABLE 4-11
Summary of Initial and Long-Term Livestock Use Levels

Management Area No. Name	A			B			C			D		
	Short Term	Proposed Treatment	Long Term	Short Term	Proposed Treatment	Long Term	Short Term	Proposed Treatment	Long Term	Short Term	Proposed Treatment	Long Term
1 Milner	151	0	151	140	634	226	140	200	167	98	0	98
2 Foothills	3,686	0	3,686	4,157	5,059	5,221	4,157	3,900	4,976	2,964	0	2,964
3 West Goose Creek	2,356	0	2,356	2,560	2,869	3,117	2,560	1,736	2,902	1,923	0	1,923
4 Middle Mountain	6,986	0	6,986	6,521	8,669	7,402	6,521	6,670	7,172	5,587	0	5,587
5 Administrative Site	0	0	0	0	0	0	0	0	0	0	0	0
6 East Hills	332	0	332	369	441	452	369	425	449	279	0	279
7 Albion	3,020	0	3,020	2,729	10,276	4,479	2,729	5,748	3,646	1,912	0	1,912
8 City of Rocks	1,643	0	1,643	1,491	2,096	1,909	1,491	1,274	1,737	1,149	0	1,149
9 Raft River Valley	14,524	0	14,524	14,898	43,905	23,707	14,898	30,535	20,787	10,555	0	10,555
10 Jim Sage	5,247	0	5,247	5,456	27,914	11,667	5,456	19,827	9,877	4,226	0	4,226
11 Cotterel	3,857	0	3,857	4,669	5,509	5,520	4,669	3,900	5,278	3,308	0	3,308
12 Highway Unit	10,711	0	10,711	12,602	1,988	13,797	12,602	1,988	13,797	8,119	0	8,119
13 Sublett	5,694	0	5,694	6,420	8,540	7,620	6,420	5,975	7,177	4,654	0	4,654
14 Isolated Tracts	109	0	109	138	30	7,151	138	0	143	0	0	0
Total	58,316	0	58,316	62,150	117,930	85,268	62,150	82,176	78,108	44,774	0	44,774

Sub Alternative D -- No livestock grazing under this alternative.

Exclusion of Improvements

Exclusion of livestock improvements poses no problem under ALTERNATIVE A. However, if at activity planning time when an Allotment Management Plan is developed for Raft River Allotment #5308, the exclusion of improvements along the Oregon Trail area may dictate what type of grazing management would be possible under ALTERNATIVES B, C, and D.

Exclusion of Land Treatments

Land treatments are specifically excluded in Management Sub Areas 8b (City of Rocks Core) in ALTERNATIVE C and 12a (Oregon Trail) in all alternatives. For ALTERNATIVE B this amounts to a potential loss in Management Sub Area 12a of ten acres of land treatment and one AUM of forage increase. In ALTERNATIVE C 65 acres of potential land treatment and a potential forage increase of 17

AUMs would be lost. Fifty-five acres and 16 AUMs would be from Management Area 8b while 10 acres and one AUM would be from Management Sub Area 12a.

There would be substantial difference in AUMs available as a result of the exclusion of land treatment from one alternative to another. ALTERNATIVES A and D have no land treatment proposed. ALTERNATIVE B has the maximum proposed while ALTERNATIVE C has less as a result of coordination and an attempt to minimize conflicts with other resources. Table 4-11 displays the AUM impact that each alternative would have on the livestock industry.

Season of Use

Season of use affects range condition and the amount of forage production. If an area is not utilized until the plants have had a chance to get a good start, that is replenish carbohydrate reserves, the vigor or health of the vegetation is improved and productivity is thereby increased. Appendix A identifies the current and proposed season of use by allotment. ALTERNATIVES B, C, and D are represented by the Proposed Season of Use. The proposed changes in turn out dates range from 15 days earlier to 61 days later. Condition, trend, and cover improves faster as the turn out date delay from the existing situation is lengthened. A later turn out date has a positive effect on vegetation while the opposite is true for earlier turn out. There are also four seasonal changes. One fall to spring, one winter to spring, one spring to fall, and one fall to summer. The fall to spring and fall to summer changes on two percent of the allotted acreage may be viewed as adverse. These shifts to earlier grazing have the potential to reduce plant vigor and lower productivity of the range. However, livestock would have to be uniformly distributed across an allotment for this impact to occur as predicted. The winter to spring change on (less than 1 percent of the area) would have no impact since the shift to spring use occurs very early, prior to the start of new plant growth. The spring to fall shift (less than 1 percent of the area) would be beneficial, enabling improved plant vigor and increased ground cover. Season of use changes are summarized in Table 4-12.

TABLE 4-12

Season of Use Summary

Change in Turnout		Percent of Total	Change in Turnout		Percent of Total
Acres	Acres		Acres	Acres	
No Change	364,481	78	Earlier turnout (days)		
			1 - 15	3,178	<1
Later Turnout (days)			Seasonal Changes		
1 - 15	45,041	10	Fall to Spring	7,876	2
16 - 30	24,329	5	Winter to Spring	2,080	<1
31 - 45	15,412	3	Spring to Fall	1,074	<1
46 - 60	2,747	<1	Fall to Summer	1,233	<1
61 - >	1,842	<1	Sub Total	12,263	3
Sub Total	89,371	19			
			Grand Total	469,293	100

Loss of Forage from Land Disposal

Except for alternative changes in the level of grazing use, public land disposal or transfer will have a greater impact on livestock management than any other land use. Table 4-13 displays the impact this will have on the livestock industry in terms of loss of AUMs. See Appendix K.

TABLE 4-13
Livestock Forage Lost Via Land Transfer

Management Area No. Name	Inventoried Federal Acres	A		B		C		D	
		Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs
1 Milner	932	0	0	0	0	0	0	0	0
2 Foothills	48,256	6,720	591	1,000	95	400	41	0	0
3 West Goose Creek	27,106	0	0	200	12	200	12	0	0
4 Middle Mountain	39,948	0	0	3,699	435	3,299	359	0	0
5* Administrative Site	(19)*	0	0	0	0	0	0	0	0
6 East Hills	3,671	0	0	686	54	160	20	0	0
7 Albion	21,205	720	126	1,180	101	540	35	0	0
8 City of Rocks	17,622	0	0	120	13	120	13	0	0
9 Raft River Valley	105,808	21,155	2,679	6,270	707	6,110	693	320	0
10 Jim Sage	76,297	360	54	505	29	240	14	240	10
11 Cotterel	40,507	4,204	283	320	37	80	11	0	0
12 Highway Unit	45,669	40	8	40	11	40	11	0	0
13 Sublett	40,594	0	0	730	94	560	61	0	0
14 Isolated Tracts	1,678	0	0	558	0	0	0	0	0
Totals	a) 469,293	33,199	3,741	15,308	1,588	11,749	1,270	560	10
% of AUM Loss From Land Disposal (Rounded)		b)		6%		3%		2%	
Short-Term Total Federal AUMs		c)		58,316		62,150		62,150	
								44,774	

$$b = \frac{a}{c}$$

* Not inventoried -- not included in totals

Sub Alternative D - No livestock grazing under this alternative.

RECREATION

Demand for recreation opportunities is expected to increase in the future due to population growth and increased leisure time. This increased demand will result in increased recreation use within the RMP area regardless of the alternative implemented. The alternatives would affect the degree of increase that would occur and the relative mix of the types of recreation opportunities that would be available.

Developed Recreation

As stated in the statewide resource guidelines, recreation facilities will be provided to meet the existing and projected recreation demand. Based on this policy, all alternatives would generally provide a supply of developed recreation opportunities and would respond to public need or demand for additional

facilities. Some specific differences do exist between the alternatives concerning the emphasis placed upon developed recreation.

Under ALTERNATIVE A, recreation facilities would be developed within the RMP area according to public demand. Development of additional recreation facilities would be specifically prohibited in the City of Rocks Core (Sub Area 8b).

ALTERNATIVE B places emphasis on developments that would support motorized recreation.

ALTERNATIVE C includes a mix of recreation developments for the support of motorized and non-motorized recreation activities.

ALTERNATIVE D provides the least amount of emphasis on developed recreation. This alternative concentrates on non-motorized recreation with provision such as hiking and horseback riding trails and trailhead facilities for the Cotterel and Jim Sage Mountains.

SUB ALTERNATIVE D provides the same emphasis as Alternative D.

Dispersed Recreation

Most dispersed recreation activities that occur in the RMP area would not be significantly affected by the implementation of any of the alternatives. The statewide guidelines indicate that opportunities for dispersed types of outdoor recreation will be provided commensurate with demand and the need to provide resource protection. Hunting and off-road vehicle recreation are the only two dispersed recreation activities that would be significantly affected by the RMP alternatives. Table 4-14 gives projected visitor days for the year 2000 for each alternative.

TABLE 4-14

Projected Visitor Days (2000)

Activity	Alternative				
	A	B	C	D	Sub D
Hunting	24,096	17,400	28,380	31,654	34,263
Off-Road Vehicle Use	41,200	52,000	47,000	35,000	35,000
Other Dispersed Recreation Activities	262,500	265,000	270,000	265,000	265,000

Off-Road Vehicles

The dispersed recreation activity that would be most affected by the various alternatives would be the use of off-road vehicles. Table 4-15 gives an overview of the impacts of each alternative on ORV use. This table shows the acres of land by ORV designation under each alternative for the RMP area. Appendix L show the ORV designations specific to each management area under each alternative.

TABLE 4-15

Off-Road Vehicle Designations by Alternative (Acres)

Vehicle Designations	Alternative			
	A	B	C	D*
<u>Wheeled</u>				
Open	274,736	417,423/415,348**	256,639	36,398
Limited***	201,357	58,850/60,925**	219,154	414,155
Closed	180	0	480	25,720
<u>Over Snow</u>				
Open	252,144	472,308	382,202	44,753
Limited***	151,173	3,965	45,197	180,836
Closed	72,956	0	48,874	250,764

* Designations for Sub Alternative D are identical to Alternative D.

** The first number refers to motorcycles; the second number applies to four-wheeled vehicles.

*** Limited to Existing Roads and Trails/Limited to Designated Routes.

ALTERNATIVE A would limit wheeled ORV use on 42 percent of the RMP area while keeping 58 percent of the area open. This alternative is less restrictive than Alternatives C and D, but is more restrictive than B. Snowmobile use would not be allowed on 15 percent of the RMP area and would be limited on 32 percent of the area. ALTERNATIVE A is more restrictive toward snowmobiles than Alternatives B and C, but not as limited as Alternative D.

ALTERNATIVE B allows the most off-road vehicle freedom with more than 87 percent of the RMP area open to motorcycles and four-wheeled vehicles and 99 percent of the area open to snowmobiles. The East Hills (Management Area 6) would be developed as an area for concentrated ORV use, particularly for trailbikes. Trails, parking facilities, and hill climb areas would be developed to accommodate a variety of off-road users.

ALTERNATIVE C would keep 54 percent of the RMP area open to wheeled ORV use and would limit the use on 46 percent of the area. Ten percent of the area would be closed to snowmobile use. This activity would be limited on an additional 10 percent of the area. The remaining 80 percent of the area would be open to snowmobile use.

ALTERNATIVE D would limit wheeled ORV use on 87 percent of the RMP area. This is the most restrictive alternative with only eight percent of the area open, 87 percent of the area limited, and five percent of the area closed to motorcycles and four-wheeled vehicles. This alternative is even more limiting on snowmobile use. Fifty-three percent of the RMP area would be closed to oversnow vehicles, thirty-eight percent of the area would be limited, and nine percent open.

The impacts of SUB ALTERNATIVE D would be identical to Alternative D.

As the discussion indicates, the alternatives provide for varied levels of ORV use. Alternative B would allow the most freedom to ORV users by designating

most of the public lands as open. Alternative D and Sub Alternative D would adversely impact the ORV users by placing the most limitations on motorized recreation opportunities. These alternatives would provide some benefits to those recreation activities that conflict with vehicle use. Alternative A and C are mid-range options with comparable restrictions on wheeled ORVs. Alternative C would provide more open areas for snowmobile use than Alternative A.

Hunting

Each of the alternatives has specific management objectives in terms of population numbers or other program constraints that affect both wildlife numbers and habitat, the two factors that regulate recreational hunting opportunity. Two categories of hunting would be affected by the alternatives, big game hunting and upland game hunting. Refer to Table 4-14 for the projected visitor days for hunting under each alternative.

ALTERNATIVE A provides forage for present mule deer and antelope numbers, with no provision for population increases. Both mule deer and upland game hunting can be expected to stabilize under this alternative. No hunting of antelope would occur.

ALTERNATIVE B provides forage to meet present deer numbers. However, large scale vegetative manipulations, harvest of woodland products in deer migration routes and no restriction on energy exploration or off-road vehicles during the critical winter months could suppress deer numbers below present levels, thereby lowering hunting opportunity. No antelope hunting would occur. Opportunity to hunt upland game would also be curtailed by the loss of sage grouse and sharptail habitat from rangeland vegetative conversions. In addition, 26 percent of Management Area 14 that provides crucial pheasant habitat would be sold. Transfer of these isolated tracts from federal ownership would significantly reduce public hunting opportunity. The remaining 64 percent of Management Area 14 would be kept in public ownership and be leased for farming under the auspices of increasing the food supply for pheasants while adding to the county and regional farm economic base. Pheasant populations are limited by adequate winter and nesting habitat. Clean farming practices on private land provide little cover for nesting and protection from winter storms. Without these two key habitat components it is doubtful that any additional summer/early fall food supply would provide an increase in pheasant numbers and a subsequent increase in hunting opportunity.

ALTERNATIVE C provides for projected 1995 mule deer populations, translating into an increase in hunting opportunity. However, the full benefit of this increased provision may be offset by rangeland vegetative conversions and the sale of public lands within known deer winter range, two factors that could reduce both the quality and quantity of mule deer habitat and lessen recreation opportunity. This alternative provides a 335 percent increase in antelope numbers. This increase would provide sufficient animals to allow hunting to occur. Antelope hunting opportunities would be provided where none currently exist. Land treatments in crucial sage grouse range could lower hunting possibilities for this species.

ALTERNATIVE D provides for projected 1995 mule deer populations, lessens livestock use on deer winter range, and has no vegetative conversion in winter habitat, all factors likely to provide increased deer and expanded hunting

opportunity. Antelope hunting opportunities would be provided as this alternative provides for a 335 percent increase in antelope numbers. Upland game also fair well under this alternative. Land treatments are excluded from crucial sage grouse range, grazing is eliminated from Management Area 14 which should improve cover for pheasants, and areawide grazing is reduced which should improve habitat diversity and cover, all factors favoring upland game and increased hunting opportunity.

The most hunting opportunities would be provided by SUB ALTERNATIVE D. With the elimination of grazing, this alternative would provide the most wildlife forage and cover. Big game numbers would show an increase over Alternative D. Upland game numbers would increase due to improved riparian habitat, increased upland cover, and the elimination of livestock impacts during nesting.

Alternative D and Sub Alternative D would provide the most upland game and big game hunting opportunities. Alternative B would have the most adverse impact on wildlife and provide the least hunting opportunity. Alternatives A and C are mid-range alternatives with Alternative C providing slightly more hunting opportunity as a result of more big game forage than Alternative A.

Recreation Management Designations

Recreation management designations have been proposed for six areas. These designations indicate which areas have the most important need for recreation management. These designations direct increased management attention to the resource values within the management area and indicate priority for recreation management actions. Table 4-16 indicates the proposed management designations by alternative.

ALTERNATIVE A would continue existing management within the six areas shown in Table 4-16. Developments would be limited within the Cotterel Area to maintain scenic vistas. A Natural Area designation would protect 27,250 acres on Jim Sage Mountain by limiting other uses to existing roads and developments.

ALTERNATIVE B provides for trailbike development under the Special Recreation Management Area designation for the East Hills. This alternative does not provide any special attention for the City of Rocks or Jim Sage areas. Recreation management for Cotterel Mountain would focus on a trailbike system.

ALTERNATIVE C includes Special Recreation Management Area designations for five of the six areas. These designations would aid in providing a mix of recreation opportunities. Protection of the City of Rocks and the high country on Jim Sage Mountain would be provided while allowing the continuation of existing uses. A trail system would be developed on Cotterel Mountain to provide for a variety of uses. Cotterel Mountain would be managed to maintain scenic quality and open space. Management of Milner would concentrate on dispersed recreation opportunities.

ALTERNATIVE D would not provide special recreation attention for the Milner Area. Substantial protective measures would be taken in the City of Rocks and Jim Sage areas. Non-motorized recreation opportunities would be provided within a 24,080 acre area on Jim Sage Mountain. Vehicle use in this area would be prohibited. Other uses would be limited or excluded for the benefit of non-motorized recreation. A trail system for hiking and horseback riding on Cotterel Mountain is included in this alternative.

TABLE 4-16

Proposed Recreation Management Designations*

Management Area No. Name	Alternative A	Alternative B	Alternative C	Alternative D	Sub Alternative D
1. Milner	Special Recreation Management Area	Special Recreation Management Area	Special Recreation Management Area		
6. East Hills		Special Recreation Management Area			
8. City of Rocks Sub Area 8b	Special Recreation Management Area		Special Recreation Management Area	Area of Critical Environmental Concern	Area of Critical Environmental Concern
10. Jim Sage Sub Area 10a	Natural Area		Special Recreation Management Area	Special Recreation Management Area	Special Recreation Management Area
11. Cotterel	Open Space Scenic Area	Special Recreation Management Area	Special Recreation Management Area	Special Recreation Management Area	Special Recreation Management Area
12. Oregon Trail Sub Area 12a	Special Recreation Management Area	Special Recreation Management Area	Special Recreation Management Area	Special Recreation Management Area	Special Recreation Management Area

*Refer to Glossary for a definition of each designation.

SUB ALTERNATIVE D would have the same impacts as Alternative D.

VISUAL RESOURCES

All of the alternatives include actions which have the potential to adversely affect visual resources. The major actions with this potential include rights-of-way (powerlines, etc.), harvest of woodland products, rangeland treatments (establishment of new seedings, maintenance of existing seedings), mineral extractions, and transfer of public land to private ownership. Most of the other actions included in the alternatives would not significantly affect large acreages.

This discussion of the effects on visual resources can only address the potential for impacts since site specific project locations and designs are needed to address specific visual impacts and possible mitigation measures. The impacts of specific projects will be identified as environmental assessments are written for activity and project plans.

ALTERNATIVE A provides land use direction that restricts major utility line and pipeline rights-of-way to specific corridors and excludes additional vegetative conversions to increase livestock forage. Both of these actions can be viewed as beneficial to the visual resource. Other management objectives would favor maintenance of visual quality, including provision of a 27,250 acre natural area on Jim Sage Mountain, establishment of a Goose Creek travel zone, and management of 40,967 acres on Cotterel Mountain to preserve open space and scenic values. This alternative also provides for protection of the City of Rocks, the only area of outstanding scenic quality on public land within the RMP area. In summary, ALTERNATIVE A contains land use direction that provides protection of significant scenic values.

The land use direction provided by ALTERNATIVE B does not adequately consider protection or management of scenic quality. Although Bureau visual resource direction provides guidelines to mitigate the adverse effects of actions that modify the landform and vegetation, the sheer amount of acreage (25 percent of the RMP area) proposed for rangeland vegetative conversions, coupled with the 20 percent of the area already treated, will have a cumulative adverse effect on visual quality. With over 99 percent of the area open to energy and mineral leasing, visual quality could suffer should large scale development occur. In addition, this alternative makes no provision to protect the City of Rocks, the only area of outstanding scenic quality in the RMP area. Developments, such as hill climb areas, proposed to accommodate intensive motorcycle use in the East Hills (Management Area 6) could cause adverse visual impacts. Overall, this alternative is the least favorable toward maintenance of the visual resource.

The effects of the land use direction established in ALTERNATIVE C on visual resources are mixed. Less (17 percent of the RMP area) rangeland treatment is proposed than under Alternative B. However, treating this acreage, coupled with the existing 20 percent of the area that has already experienced a change in vegetative type, would result in modification of nearly 40 percent of the vegetation in the RMP area. Cotterel Mountain would be managed to maintain scenic quality and open space. The outstanding scenic quality of the City of Rocks area would be protected via a Special Recreation Management Area designation and future landscape modifications such as fences, powerlines, and land treatments would be excluded. This alternative would protect scenic values in the Goose Creek travel zone. Like Alternative B, the majority of the area is open to energy and other mineral leasing. If large scale development occurred, visual quality in the area of this development would suffer.

The land use direction provided by ALTERNATIVE D is highly favorable toward visual quality. The City of Rocks would be designated an area of critical environmental concern, thereby protecting the outstanding scenic quality of the area while supporting the National Natural and National Historic Landmark designations placed upon it by the National Park Service. In addition, 24,080 acres on Jim Sage Mountain and 40,967 acres on Cotterel Mountain would be managed to preserve open space and scenic values. The 23 percent reduction in livestock grazing should benefit scenic quality throughout the area as a result of improved vegetation condition.

SUB ALTERNATIVE D would have an effect on visual resources similar to that described for Alternative D. The result of no livestock grazing would be an improvement in vegetation condition eventually resulting in the restoration of a more "natural" landscape on the public lands, and enhanced scenic quality and aesthetic values.

In terms of enhancing visual quality, Alternative D and Sub Alternative D are the most favorable land use options. Alternative A provides for protection of significant scenic values. However, with a larger percentage of the RMP areas open to ORVs and a greater percentage of the rangeland in poor to fair condition, A poses greater visual liabilities than either D or Sub D. Alternative C would protect some important areas of scenic values, but also has the potential to adversely affect visual quality on 82,716 acres scheduled for rangeland treatment and on riparian areas that would be overgrazed. Alternative B does not adequately provide for the management of the visual resources in the RMP area.

CULTURAL RESOURCES

Impacts to cultural resource sites consist of any change from the original condition. Changes in the physical structure result in the loss of information contained in the sites. Since cultural resources are finite and non-renewable, such changes are permanent, irreversible, and cumulative.

Activities that could have impacts on cultural resource sites may be viewed as being of two different types - localized and dispersed. Localized activities are those that occur at a specific, predetermined location. These might include range project developments, realty actions, or mining claim work. Potential impacts from these types of activities are generally mitigated as a result of cultural resource clearance inventories which are required prior to the initiation of on-the-ground work. Effects from localized activities will be minimal and will, therefore, not be further considered. Dispersed activities, such as livestock trampling, ORV use, recreation use, and erosion are generalized wide-spread activities, the effects of which cannot be readily mitigated short of prohibiting the activity. Estimation of these effects can be made, however, on a long-term basis.

A continuance of the existing situation, ALTERNATIVE A, would result in the continued downward trend in the condition of both known and unidentified cultural resource sites. Artifact damage and displacement resulting from surface erosion and cattle trampling, the most common types of impacts, would continue to occur at roughly the present rates. Recreation associated impacts, such as ORV damage and artifact collecting, would also be expected to continue at present rates.

Impacts to cultural resource sites from dispersed activities would show a substantial increase under ALTERNATIVE B. Impacts from livestock trampling would increase in proportion to the increase in the level of grazing use. Of the 94 identified cultural resource sites, 81 are located in 25 allotments that would have a long-term increase in grazing use of 66 percent. A significant increase in overall trampling impacts is, therefore, projected for these 81 sites. Trampling would not occur on seven sites located in unallotted areas that would not be grazed. Four allotments containing six sites would have an average decrease in grazing use of nine percent, resulting in a small decline in overall trampling impacts at these sites. Livestock trampling will also impact currently unidentified sites. The total grazing increase for ALTERNATIVE B is 46 percent. Hence, a large increase in cultural site damage for unidentified sites may be anticipated as a result of livestock trampling.

Impacts from surface erosion are expected to increase under ALTERNATIVE B. In the long term an overall increase in soil erosion of roughly 24 percent is anticipated (see Appendix D). This increase in soil erosion will result in a relatively large increase in surface modification and horizontal displacement of artifacts, thus compromising the stratigraphic integrity of unidentified cultural sites. The situation for known sites is somewhat worse. Only one of the 30 allotments containing cultural resource sites are projected to show a decrease in surface erosion. This allotment contains one site and surface erosion is projected to decrease by 32 percent. Surface erosion in nine allotments, containing 25 sites, is projected to remain stable. Surface erosion in the remaining 20 allotments, which contain 62 sites, is projected

to increase by 34 percent. Thus, it appears that known cultural resource sites are located in allotments that are more susceptible to erosion and will, therefore, be subject to impacts similar to those described for unidentified sites.

ALTERNATIVE B increases the acreage designated as open to Off-Road Vehicles (ORVs) by 51 percent over present land use direction. If the additional acreage that is open to ORVs translates into increased use, the potential exists for additional adverse impacts to cultural sites directly through artifact breakage or displacement. Monitoring will be used to establish the magnitude of this potential impact.

Long-term impacts from livestock trampling would increase under ALTERNATIVE C, but not as much as under Alternative B. Seventy-nine of the identified sites are located in allotments that would have a 49 percent increase in livestock use. Adverse impacts to these sites would therefore be expected to increase significantly. Nine sites are located in allotments not scheduled for increased livestock use. Breakage and displacement of artifacts at these nine sites would not be accelerated, nor would the impacts to the sites be lessened. A small decrease in the amount of artifact trampling and breakage would be expected on six sites located in allotments that are scheduled for an overall nine percent decrease in livestock use. Overall, livestock grazing under ALTERNATIVE C would increase 34 percent, resulting in a relatively large increase in trampling impacts for currently unidentified sites.

Impacts from surface erosion would be expected to decrease under ALTERNATIVE C. Surface erosion on 22 allotments containing 49 sites is projected to remain stable. On 28 allotments containing 39 sites surface erosion is expected to decrease 10 percent. The remaining six sites are in unallotted areas where erosion rates would also remain stable. Thus most known sites would be subjected to less surface erosion. The overall decrease in the soil erosion rate for ALTERNATIVE C is seven percent, resulting in a moderate, but perhaps significant, increase in adverse impacts to unidentified sites.

The amount of land open to unrestricted ORV use decreases by six percent under ALTERNATIVE C. This decrease may lead to a slight reduction in vehicle-related impacts.

The selection of ALTERNATIVE D would lessen the impacts from livestock trampling. Overall, this alternative provides for a 23 percent decrease in livestock use, resulting in substantially less trampling to unidentified cultural sites. Adverse impacts from livestock trampling would be stabilized on 21 sites located in allotments where livestock use would be unchanged, or in unallotted areas. Seventy-three sites are located in 24 allotments that would have a 20 percent overall decrease in livestock use. These known sites would be subjected to substantially less trampling.

Soil erosion is expected to decrease by 15 percent under ALTERNATIVE D, resulting in less displacement and disruption of cultural sites. This alternative would significantly lessen the damage to currently unidentified sites. The decrease in impacts to known sites would be similar, with 30 allotments containing 88 sites showing an overall decrease in erosion of 17 percent. The remaining six sites in unallotted areas would be expected to remain stable.

The amount of land open to unrestricted ORV use under ALTERNATIVE D shows a dramatic decrease. Eighty-seven percent fewer acres would be designated

"open." The result would be a substantial decline in vehicle-related adverse impacts to cultural sites.

Long-term impacts from livestock trampling would be eliminated under SUB ALTERNATIVE D. That is, breakage and displacement of artifacts resulting from livestock activity would decrease by 100 percent.

Soil erosion is expected to decrease by 46 percent under SUB ALTERNATIVE D, resulting in significantly fewer erosion impacts to unidentified sites. Decreases in erosion impacts to known sites would be even greater, with 30 allotments containing 88 sites showing a 57 percent decrease in erosion. ORV-related impacts would remain the same as those projected in Alternative D.

In summary, Sub Alternative D provides the greatest benefit to cultural resources by eliminating 100 percent of impacts caused by livestock grazing and substantially cutting erosion caused artifact displacement. Because of a 23 percent reduction in livestock use, less of the area open to ORVs, and decreased erosion, Alternative D is the second best management choice. Alternative A is a mid-range choice since it stabilizes livestock use and erosion. Alternative B is not preferred because of increased soil erosion and increased breakage and displacement of artifacts resulting from additional livestock use. Increased artifact breakage and displacement would also result under Alternative C.

MINERAL AND ENERGY RESOURCES

Regardless of which alternative is selected, the national, regional, and local demand for minerals will not vary. BLM administration of locatable mineral activities will be in accordance with the 1872 mining law, the National Environmental Policy Act (NEPA), and 43 CFR 3809, and will be applied consistently irrespective of BLM plan alternative. Similarly, the administration of leasable and salable minerals is based on statutes, regulations, and policies which are unaffected by any of the alternatives. What the different resource management alternatives will do is specify the lands open or closed to mineral leasing or entry and the degree of surface resource protection required.

The type of outputs associated with the BLM's minerals program include the approval of "Notices of Intent" and "Plans of Operation" for mining activities, sales of aggregate and rock, permits for geophysical exploration, and recommendations on oil and gas lease applications. Applications are externally generated and the quantity received is responsive to economic forces beyond BLM's influence.

Oakley Stone

Under all alternatives, Middle Mountain, the source for Oakley Stone is open to location of mining claims and extraction of stone.

All Other Locatable Minerals

Under all four alternatives there would be 19 acres of low mineral potential land withdrawn from mineral entry. This represents a fraction of one percent of the total acreage in the RMP area. In ALTERNATIVE A there would be an

additional 5,135 acres of low to moderate mineral potential land withdrawn from entry. This represents one percent of the total acreage in the RMP area. In ALTERNATIVE B there would be no additional acreage of low to moderate mineral potential withdrawn from entry. In ALTERNATIVE C there would be 2,055 additional acres of low to moderate mineral potential withdrawn from mineral entry. This represents less than one percent of the total RMP area. In ALTERNATIVE D and SUB ALTERNATIVE D an additional 38,290 acres of low to moderate mineral potential land are withdrawn from mineral entry. This represents eight percent of the total acreage in the RMP area.

Energy Resources, Leasable, and Saleable Minerals

The availability of public lands for mineral sale, energy resource, and other mineral leasing is portrayed in the Table 4-17. Present and projected industry, highway department, and public demand for sand and gravel would be met under all alternatives.

TABLE 4-17

Availability of the Public Land for Mineral Leasing and Sale

	Alternatives			
	A	B	C	D*
	Acres/Percent	Acres/Percent	Acres/Percent	Acres/Percent
Oil, Gas, and Geothermal Resources				
Open	53,010/11	473,694/99	134,105/28	44,734/ 9
Closed	2,055/<1	- -	- -	- -
Seasonal Closure	420,629/88	- -	337,054/71	428,305/90
No Surface Occupancy	3,099/<1	2,579/<1	5,394/ 1	5,424/ 1
Leasable Minerals				
Open	471,119/99	476,254/100	474,199/99	437,964/92
Closed	5,154/ 1	19/<1	2,074/<1	38,309/8
Saleable Minerals				
Open	434,101/91	473,694/99	470,011/99	432,839/91
Closed	42,172/ 9	2,579/<1	6,262/ 1	43,434/ 9

*Acreages under Sub Alternative D would be the same as Alternative D.

LANDS

Transfer Areas

The public identified the need for several types of land transfers including:

1. Private Exchanges

Presently 21 exchange applications are on file, involving 5,725 acres of public land within the Cassia RMP area.

2. State Exchanges and Forest Service Transfer.

3. Disposal

This includes Recreation and Public Purpose (R&PP) sales, lands available for commercial and residential needs, lands available for agricultural development, and public sale tracts of land that are difficult and uneconomic to manage, are no longer needed for a specific purpose and/or are not in the public interest to retain.

The plan alternatives will not affect public demand for transfer areas, however, the alternatives will affect the acreages available for transfer. Before any parcel is transferred out of federal ownership, site specific environmental consequences and access concerns will be considered. Table 4-18 shows the acreages available for transfer by alternative.

TABLE 4-18

Types of Land Transfer and Acreage by Alternative

Alt.	Agricultural Development	Private Exchange	State Exchange	R&PP	Disposal	Forest Service Trans.
A	25,420	5,725	1,124	690	720	0
B	2,955	6,004	2,959	160	3,560*	2,042
C	840	5,234	2,959	80	2,539*	2,042
D**	0	0	0	0	560	0

*See Appendix M for the 1984-1988 proposed 5 year sale plan.

**Land transfers in Sub Alternative D would be the same as Alternative D.

ALTERNATIVE A designates 25,420 acres of public land for agricultural development. However, all of this acreage falls within Idaho Department of Water Resources critical groundwater areas and, therefore, could not be developed for agricultural purposes unless the State designation was dropped. Practically then, ALTERNATIVE A does not satisfy the public issue of providing land for agricultural development. ALTERNATIVES B and C satisfy all public issues concerning transfer areas. ALTERNATIVES D and SUB D do not satisfy any of the public issues concerning transfer areas. However, ALTERNATIVES D and SUB D satisfy the public concern for the retention of all lands with grazing potential in federal ownership.

Rights-of-Way

The majority of existing rights-of-way (R/W) are located in populated and residential areas where public services are necessary. The demand for R/Ws will not vary by management alternative as the necessity for R/Ws depends on public service needs, not existing resources. The alternatives will, however, affect the acreage open to R/Ws.

A statement of purpose and need, an environmental assessment, and a land report are required before a R/W can be granted. The effect of the proposed

use on the environment and local economic and social impacts are all considered before a grant is issued.

ALTERNATIVES B, C, and D and SUB ALTERNATIVE D satisfy the public issue for providing R/Ws. Although ALTERNATIVE A allows for R/Ws, major R/Ws such as pipelines and powerlines are restricted to existing R/W corridors. If it is determined to be more environmentally and economically sound to allow a R/W outside of the corridor, a plan amendment as well as an environmental assessment would need to be completed if ALTERNATIVE A were adopted.

Table 4-19 shows the acreages open to R/Ws by plan alternative.

TABLE 4-19			
Acreage Available for Rights-of-way by Alternative			
Alternative	Acres Available for		
	All Rights-of-Way	Restricted Rights-of-Way	No Rights-of-Way
A	199,707	273,923*	2,643
B	474,833	0	1,440
C	432,323	40,967	2,983
D**	408,158	40,967	27,148

*Major pipelines/powerline rights-of-way restricted to 51 miles of corridor.

**The acreage available for rights-of-way is the same in Sub Alternative D as in Alternative D.

Sanitary Landfills

Under the Recreation and Public Purposes Act, suitable lands are made available to city and State governments for sanitary landfills. All alternatives provide for present landfills and should meet projected future needs. Table 4-20 indicates the availability of the public lands for landfills. Additional landfill leases would be issued where selected sites have soils deemed suitable according to Soil Conservation Service standards and the proposed plan of operation meets all county, State and Federal public health and safety standards.

TABLE 4-20		
Acreage Available for Landfills by Alternative		
Alternative	Acres Open to Landfills	Acres Closed to Landfills
A	465,403	10,870
B	466,033	10,240
C	426,358	49,915
D*	321,392	154,881

* The acreage available for landfills is the same in Sub Alternative D as in Alternative D.

ECONOMICS

Economic Efficiency

Each alternative was analyzed to determine its relative economic efficiency and contribution to national economic development. The type of analysis used was benefit/cost analysis. All identifiable benefits and costs, to whomever they accrue, were included in the analysis. These benefits and costs were then discounted to account for the time value of money. The discount (or interest) rate used was 7.875 percent. This rate is derived from a formula specified in the Water Resources Development Act of 1974 (P.L. 93-251). Each alternative was evaluated, assuming that if the particular alternative was not implemented, then no activity at all would occur on the public lands. Although it is recognized that this would not really occur, it was not possible to determine the level of activity that would take place with no management. This leads to inflated benefits and higher benefit/cost ratios than would be found if the true level of activity with no management could be identified. This affects all alternatives equally and does not affect the relative economic efficiency when alternatives are compared to each other. Table 4-21 shows the results of this benefit/cost analysis of the Cassia RMP alternatives.

TABLE 4-21

Benefit/Cost Analysis Summary

Alternative	Total Discounted Benefits	Total Discounted Cost	Net Present Worth	Benefit/Cost Ratio
A	\$37,558,935	\$10,007,820	\$27,551,115	3.75
B	\$37,154,859	\$10,377,879	\$26,774,980	3.58
C	\$40,522,015	\$10,165,778	\$30,356,237	3.99
D	\$45,055,777	\$ 9,666,374	\$35,389,403	4.66
Sub D	\$41,052,568	\$ 8,322,008	\$32,730,560	4.93

Economic Equity

This section deals with the question of who gets the benefits and who pays the costs of the various alternatives. This looks at local (Cassia County) impacts instead of the national impacts of the previous section. This section is divided into three parts. The first part looks at income gains and losses, the second deals with employment changes, the third is devoted to a look at impacts to ranchers and the livestock industry.

Income

Local income effects are felt in primarily three areas: Livestock, Recreation, and Construction. Livestock income is generated due to gains or losses of AUMs (discussed in more detail below), recreation income is generated by

increased recreation visitor use, and construction income is generated from installation and maintenance of range improvements. The initial impacts are those arising directly from changes in AUMs, recreation use, or construction. In addition, secondary impacts occur. When income is gained (or lost) in one part of the local economy, other portions of the economy also gain (or lose) due to responding that occurs. This is called the multiplier effect. The multipliers used in this analysis were published by the Bureau of Economic Analysis in 1977. A more complete description of multipliers and how the multipliers used here were derived can be found in the Economics section of the Analysis of the Management Situation for the Cassia RMP. The multipliers used were:

Livestock	1.2447
Recreation	2.2973
Construction	1.7094

Table 4-22 shows the direct impacts of each alternative on local income initially and in the long term.

TABLE 4-22
Direct Income Changes by Alternative

Alternative	Livestock		Recreation		Construction		Total	
	Initial	Long-Term	Initial	Long-Term	Initial	Long-Term	Initial	Long-Term
A	\$ 0	\$ 0	+\$22,807	+\$144,452	+\$26,918	+\$26,918	+\$ 49,725	+\$ 171,370
B	+\$ 241,425	+\$1,519,075	+\$16,490	+\$107,610	+\$28,687	+\$38,880	+\$ 287,102	+\$1,665,565
C	+\$ 241,425	+\$1,104,450	+\$29,560	+\$187,211	+\$28,687	+\$35,938	+\$ 299,272	+\$1,327,599
D	-\$ 796,400	-\$ 796,400	+\$30,945	+\$195,986	+\$26,918	+\$20,900	-\$ 738,537	-\$ 579,514
Da	-\$3,451,050	-\$3,451,050	+\$32,608	+\$206,516	0	0	-\$3,418,442	-\$3,244,534

* Expenditures in the recreation and construction industries were converted to income based on income/sales ratios for the retail trade sector in the Cassia County economy.

Total secondary income gains would amount to:

	Initial	Long Term
Alt. A	+\$ 48,684	+\$206,494
Alt. B	+\$101,469	+\$538,925
Alt. C	+\$117,776	+\$538,622
Alt. D	-\$135,638	+\$ 74,200
Sub Alt. D	-\$802,170	-\$576,559

Employment

Gains/losses in employment result in response to income gains in the various sectors of the County economy. Total employment gains would range from a loss of 182 to a gain of 22 jobs in the short term and from a loss of 144 to a gain

of 110 in the long term. Alternative specific employment changes are shown below:

Alternative	<u>Total Employment Gains</u>	
	Short Term	Long Term
A	7	33
B	20	110
C	22	105
D	-34	0
Sub D	-182	-144

Livestock Industry

As indicated in the income section above, the livestock industry would see income increases in all alternatives except Alternative D. Table 4-23 shows how each size group would be affected by each alternative.

TABLE 4-23

Projected Income Changes Per Permittee by Ranch Size Group

	Alt. A	Alt. B	Alt. C	Alt. D	Sub Alt.D
Short Term					
Group 1	\$ 0	+\$ 150	+\$ 150	-\$ 500	-\$ 2,150
2	0	+\$ 375	+\$ 375	-\$ 1,250	-\$ 5,425
3	0	+\$ 1,250	+\$ 1,250	-\$ 4,175	-\$ 17,800
4	0	+\$ 1,300	+\$ 1,300	-\$ 4,300	-\$ 18,675
5	0	+\$ 7,000	+\$ 7,000	-\$23,000	-\$100,000
6	0	+\$ 3,275	+\$ 3,275	-\$10,750	-\$ 46,650
Long Term					
Group 1	0	+\$ 950	+\$ 700	-\$ 500	-\$ 2,150
2	0	+\$ 2,400	+\$ 1,725	-\$ 1,250	-\$ 5,425
3	0	+\$ 7,825	+\$ 5,700	-\$ 4,175	-\$ 17,800
4	0	+\$ 8,225	+\$ 5,975	-\$ 4,300	-\$ 18,675
5	0	+\$44,000	+\$32,000	-\$23,000	-\$100,000
6	0	+\$20,525	+\$14,925	-\$10,750	-\$ 46,650

Ranch stability would be maintained or enhanced with all alternatives except ALTERNATIVE D and SUB ALTERNATIVE D. Under ALTERNATIVE D as many as 85 permittees could have difficulties covering cash costs (and thus go out of business). This number would rise to 142 under SUB ALTERNATIVE D. Permit values, and thus the value of the permittees' base property, would be affected by each of the alternatives. Based on the values reported in Boly (1980) and Fowler and Gray (1980), the gains/losses in permit values could range from \$667 to \$3,000 per animal unit. Table 4-24 shows how this would impact permittees as a result of implementing the various alternatives.

TABLE 4-24

Permit Value Changes

	Alternative A		Alternative B		Alternative C		Alternative D		Sub Alternative D	
	Low*	High**	Low*	High**	Low*	High**	Low*	High**	Low*	High**
Short Term										
Group 1	\$ 0	\$ 0	+\$ 334	+\$ 1,500	+\$ 334	+\$ 1,500	-\$ 1,114	-\$ 5,010	-\$ 4,780	-\$ 21,500
2	0	0	+\$ 834	+\$ 3,750	+\$ 834	+\$ 3,750	-\$ 2,781	-\$ 12,510	-\$ 12,062	-\$ 54,250
3	0	0	+\$ 2,781	+\$ 12,510	+\$ 2,781	+\$ 12,510	-\$ 9,271	-\$ 41,700	-\$ 39,575	-\$ 178,000
4	0	0	+\$ 2,888	+\$ 12,990	+\$ 2,888	+\$ 12,990	-\$ 9,538	-\$ 42,900	-\$ 41,521	-\$ 186,750
5	0	0	+\$15,561	+\$ 69,990	+\$15,561	+\$ 69,990	-\$51,159	-\$230,100	-\$222,333	-\$1,000,100
6	0	0	+\$ 7,284	+\$ 32,760	+\$ 7,284	+\$ 32,760	-\$23,745	-\$106,800	-\$103,719	-\$ 466,500
Long Term										
Group 1	\$ 0	\$ 0	+\$ 2,134	+\$ 9,600	+\$ 1,534	+\$ 6,900	-\$ 1,114	-\$ 5,010	-\$ 4,780	-\$ 21,500
2	0	0	+\$ 5,336	+\$ 24,000	+\$ 3,869	+\$ 17,400	-\$ 2,781	-\$ 12,510	-\$ 12,062	-\$ 54,250
3	0	0	+\$17,409	+\$ 78,300	+\$12,673	+\$ 57,000	-\$ 9,271	-\$ 41,700	-\$ 39,575	-\$ 178,000
4	0	0	+\$18,276	+\$ 82,200	+\$13,273	+\$ 59,700	-\$ 9,538	-\$ 42,900	-\$ 41,521	-\$ 186,750
5	0	0	+\$97,849	+\$440,100	+\$71,169	+\$320,100	-\$51,159	-\$230,100	-\$222,333	-\$1,000,000
6	0	0	+\$45,623	+\$205,200	+\$33,217	+\$149,400	-\$23,745	-\$106,800	-\$103,719	-\$ 466,500

* Boly 1980

** Fowler and Gray 1980

SOCIAL CONDITIONS

ALTERNATIVES A, B, and C would have no measurable affect on the social systems of the area.

ALTERNATIVE D and SUB ALTERNATIVE D could have greater consequences. These alternatives would cause between 85 and 142 permittees to seek outside employment to subsidize ranch income, consider ranch consolidation, or sale of their ranch in order to survive. If many ranches were in fact sold, local community groups and businesses could experience losses of membership or clientele that in some cases could threaten their continued existence. For some, ranch sales and subsequent relocation to another area could mean loss of the ranching way of life.

SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

This section identifies the trade-offs between short-term use and long-term productivity of the resources involved in the four alternatives and one sub alternative. For this analysis, short term refers to the period of implementation of the plan within about 10 years, and long term refers to the period 20 years or beyond in which the proposals' adverse or beneficial impacts would still occur.

Soils and Watershed. Long-term soil loss would be greatest under Alternatives B. Vegetative treatments, increased long-term livestock use, and fewer restrictions on ORV use would result in an estimated erosion rate of 5.1 tons/acre/year. Under Alternative A erosion would remain at the current rate of 4.1 tons/acre/year. Estimated erosion would decrease under Alternative C, to 3.8 tons/acre/year, as a result of improved vegetation cover. The lack of

vegetative treatments, reduced or no livestock use, and more restrictive ORV use under Alternative D and Sub Alternative D would result in lower estimated erosion rates, 3.6 and 2.2 tons/acre/ year respectively. Only Alternatives D and Sub D would show improved watershed conditions - better water quality, improved watershed cover, reduced run-off, and improved wetland/riparian condition. Alternative A would show slightly declining to stable watershed conditions, while the actions proposed in Alternatives B (vegetative treatments, increased livestock use, fewer restrictions on ORV use, and other land disturbing actions) would result in declining watershed conditions. Conditions would remain static or show only slight improvement under Alternative C.

Vegetation. Short-term impacts to vegetation would be most significant under Alternatives B and C. Virtually all woodland habitat is open for harvest under these alternatives, 25 and 17 percent of the area, respectively, is proposed for vegetative treatment, and other activities would be less restricted than under other alternatives. Long-term vegetative production, though, would be up as would condition and trend. No vegetative treatments coupled with reduced livestock use, less acreage available for woodland harvest, and more restrictions on other land uses would result in improved condition and trend thus increasing vegetative production over the long term under Alternatives D and Sub D. Riparian/wetland vegetation condition would improve significantly as well. Current conditions would stabilize under Alternative A. Cover would improve slightly under all alternatives except A, with Sub Alternative D showing the most improvement.

Woodland Resources. Short-term harvest of firewood, posts, and poles would have little effect on long-term productivity since all estimated demands would be met within the sustained yield capability of the woodland resource, even under Alternatives D and Sub D, the most restrictive options. Christmas tree cutting within the pinyon pine stands would also be within the sustained yield capability of the resource.

Wildlife. In the short term, wildlife habitat and forage would decline under Alternatives B and C due to vegetative treatments. Under Alternative C, long-term forage needs for big game would be available to meet 1995 population projections. Increased competition with livestock would adversely affect the population under ALTERNATIVE B. Only current forage requirements for mule deer and antelope would be met under Alternatives A and B. Forage to meet 1995 projections would be available under Alternatives D and Sub D, with livestock competition reduced or eliminated. Upland game habitat and aquatic habitat would show some decline under Alternatives A, and B, with B having the greatest impact. Some improvement in upland game habitat would result from the inclusion of forbs in seed mixtures used on treatment areas under C while improved management would result in slight improvement to aquatic habitat. Upland game and aquatic habitat would show significant short and long-term improvement under Alternatives D and Sub D. In Sub Alternative D, initial population gains for upland game, long-billed curlew, and burrowing owl would decline over the long-term as vegetation becomes dense and overgrown. Land disposals would also adversely affect wildlife populations through the loss of small amounts of habitat with Alternative A recommending the most disposal and D and Sub D the least.

Livestock Grazing. Short-term stocking rates would range from no use under Sub Alternative D to a seven percent increase over the current six year

average use under Alternatives B and C. Alternative A is the six year average use and Alternative D would be 23 percent below A. Vegetative treatments under Alternative B would increase long-term stocking levels to 46 percent above current average use, while under C treatments would result in a long-term stocking level 34 percent above current use. Long-term stocking levels under Alternatives A and D would be the same as short-term stocking levels. No grazing would continue under Sub Alternative D.

Recreation. Short-term recreational use would remain relatively constant between alternatives, but long-term use would vary significantly. Hunting opportunities would be highest under Sub Alternative D with Alternative D next highest. Alternative B would provide the least opportunity for hunting. Alternative B, though, provides the greatest opportunity for ORV recreation, while D and Sub D provide the least. Alternatives A and C lie between these extremes in both hunting and ORV opportunities, with C being slightly higher. Long-term opportunity for other dispersed recreation activities is greatest in Alternative C, lowest in A. The long-term opportunity to participate in other dispersed recreation activities is estimated to be the same in Alternatives B, D, and Sub D. Alternatives D and Sub D provide for the greatest amount of non-motorized recreation while Alternative B places emphasis on motorized recreation. Appropriate facility development would occur under all alternatives, depending on public demand.

Visual Resources. Over the short term, vegetative treatments, harvesting of woodland resources, and other activities which alter the natural landscape would result in some adverse impacts to visual quality. These impacts would be the greatest under Alternative B and least in Alternatives D and Sub D. Revegetation of treatment areas under Alternatives B and C would lessen the impact over the long term, though the emphasis on production of livestock forage under B would tend to result in monotypic seedings. Alternative B provides the least protection for visual resources, while Alternatives D and Sub D provide the most. Alternatives A and C are middle ground alternatives with few differences. Mitigation would be provided on most project work for all resources on a site-by-site basis, thus reducing visual impacts.

Cultural Resources. Increased inventory due to project work would be beneficial to cultural resources over the short term, but increased stocking levels associated with long-term proposals under Alternative B and C would adversely affect cultural sites. Alternatives C, D, and Sub D provide for protection and further study in the West Goose Creek Management Area which contains the most significant concentration of prehistoric sites in the RMP area. Short and long-term affects would be most favorable to cultural resources under Alternatives D and Sub D, while B would be the least favorable alternative.

Minerals. Little variation occurs between alternatives relative to minerals management. Projected demand would be met under all alternatives. Alternatives D and Sub D are the most restrictive with eight percent of the area closed to removal of leasable minerals and nine percent to saleable mineral. Seasonal closures on energy leases are common on large percentages of the area under all alternatives except B, which opens virtually all of the RMP area to all mineral activities with few restrictions. There is little probability of short-term use of the mineral resources causing problems in meeting foreseeable long-term demand.

Lands. Little differentiation occurs between alternatives. Alternative A provides for the most acres of transfer, with B and C following. Demand for

rights-of-way and landfill sites would be met under all alternatives, though some restrictions do occur under all alternatives.

Economic and Social Conditions. Short-term impacts would be most significant under Alternatives D and Sub D. Alternatives B and C have the same favorable short-term affect on ranch incomes, while B is slightly better over the long term. Ranch incomes under Alternatives D and Sub D would suffer significantly over the long term with 80 to 142 ranchers (out of 147) being forced to subsidize ranch incomes, consider consolidation of operations, or sell their ranches. Employment would be down under Sub Alternative D over both the short and long term, while Alternatives B and C are most favorable toward employment. Sub Alternative D provides the highest benefit/cost ratio over the long term, while B has the lowest. Alternatives D, C, and A follow between Sub D and B in descending order.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section identifies the extent to which the alternatives would irreversibly limit potential uses of the land and resources. Irreversible and irretrievable commitment of resources occur when a wide range of future options are foreclosed.

Soils and Watershed. Soil loss would be an irretrievable commitment in areas of land treatment, minerals development, ORV use, and other ground disturbing activities. However, new soils would develop naturally at a very slow rate.

Vegetation. In areas of land treatments, land and vegetation would be committed for the lives of the projects.

Wildlife. The loss of wildlife habitat through land disposal actions or other actions that would permanently alter the character of the land represents an irretrievable and irreversible land use commitment.

Recreation. Loss of recreation opportunities relative to hunting are tied to the loss of game habitat. Loss of habitat would result in a permanent loss of hunting opportunities.

Lands. Disposal of public land would result in an irreversible and irretrievable loss of administrative control and public use for all resource values except mineral values on those parcels.

Minerals. The sale and mining of various mineral materials (Oakley stone, sand and gravel, oil and gas, etc.) would result in the irreversible and irretrievable loss of those minerals extracted.

Cultural Resources. Because cultural resources are finite and non-renewable, any adverse impact caused by the implementation of the Cassia RMP would result in the irreversible commitment of the cultural resources involved.

CHAPTER 5

CONSULTATION AND COORDINATION

This chapter lists all agencies, organizations and individuals to whom copies of the draft RMP/EIS will be sent. Everyone on the list is being requested to comment on the draft and many have already contributed to its development. Public involvement, as summarized in Chapter 1, is an integral part of BLM's land use planning.

BLM PLANNING INTERRELATIONSHIPS

Interagency coordination between the Bureau and other Federal agencies, State and local governments, and Indian tribes is required under Bureau planning regulations, 43 CFR Part 1600. The following discussion outlines this coordination process.

County Planning

Portion of four counties are included in the RMP area: Cassia, Power, Oneida, and Twin Falls. Although none of the county plans or zoning regulations place binding constraints on public land management, the BLM is obligated, under Section 202 of the Federal Land Policy and Management Act, to avoid decisions that may conflict with local planning. Any potential conflicts with county planning and zoning were resolved during the formulation of the Preferred Alternative.

Private Lands

Approximately 57,120 acres of private land are included within the boundaries of allotments in the RMP area. These lands are primarily owned by permittees and would be subjected to the proposed grazing management under voluntary exchange-of-use agreements. A "Cooperative Ranch Management Plan" with the permittee, Soil Conservation Service, Forest Service, State of Idaho, and BLM

would be explored for allotments with predominantly private or State land. Meetings were held with the users in each allotment with preference attached (117 allotments) between December 30, 1982, and February 7, 1983, to discuss stocking levels and grazing management for the allotment.

U. S. Forest Service

The U. S. Forest Service administers four units of the Sawtooth National Forest within or bordering on the RMP area. The Sawtooth National Forest is presently preparing its forest plan. Considerable interchange has occurred between the Forest Service and the BLM relative to the two planning efforts. Issues and concerns have been exchanged, resource specialists have exchanged inventory data, current and proposed management directions have been examined, all to insure consistency between the plans.

Not only is it important to insure similar resource management direction on adjoining BLM and Forest Service lands, but livestock grazing patterns must be coordinated. Of the 147 livestock operators presently using the RMP area, 80 also graze livestock on Forest Service lands, typically during the summer season. These operators have traditionally used Forest Service lands in conjunction with BLM, State, and/or private lands to support a year-round grazing operation. Therefore, coordination of seasons of use and other aspects of grazing management was considered in developing the livestock grazing aspects of the Preferred Cassia Resource Management Plan.

U. S. Fish and Wildlife Service

The Fish and Wildlife Service conducts predator control in the RMP area under a joint agreement with BLM and the Idaho Department of Fish and Game. The control consists of aerial shooting and limited trapping of coyotes, mostly during the fall, winter, and early spring.

The Fish and Wildlife Service also serves as the consulting agency under the Endangered Species Act. One proposed threatened or endangered plant species (Erigeron latus) is located in the RMP area. The bald eagle, an endangered species, is a common winter migrant in the area. The peregrine falcon, also an endangered species, is a rare migrant.

The Minidoka National Wildlife Refuge lies partially within the boundary of the RMP area. The Refuge Manager has provided input into the planning through attendance at public meetings and other public involvement efforts. These concerns have been considered in developing the resource alternatives.

Soil Conservation Service

The Soil Conservation Service (SCS) completed a Third Order soil survey on public lands in the RMP area under contract with the Bureau. This survey provided information used in developing and carrying out range inventories as well as providing inventory data relative to various soil properties such as erodability and suitability of the soils for various actions (vegetative treatment, for example). Interchange between SCS and Bureau personnel (soil scientist, range specialist) has occurred throughout the process.

Idaho Department of Fish and Game

The Idaho Department of Fish and Game (IDFG) has established State goals and objectives for wildlife management on all lands in the State, including public lands within the RMP area. Since wildlife habitat would be affected by many aspects of the preferred alternative (grazing management in particular), there has been close coordination between BLM and IDFG. Specifically, the IDFG has cooperated with BLM in determining existing big game numbers and projecting desirable herd size for the RMP area for 1995.

The IDFG also conducted the aquatic stream survey for Cassia County under a contract with the BLM. This survey identified current stream condition, present fishery condition, and fishery potential for streams (or portions of streams) on public land.

Idaho Department of Parks and Recreation

The Idaho Department of Parks and Recreation has certain responsibilities for evaluating and enhancing recreation opportunities throughout the State. As a part of its program, the department has published a State Comprehensive Outdoor Recreation Plan (SCORP). This plan relies upon the continued use of land administered by BLM or other agencies to fulfill many of the recreational demands within the State. The projected visitor use data was considered in formulating the Preferred Alternative.

The Parks and Recreation Department is currently preparing a new SCORP and held a series of public meetings in the state to identify the issues of concern to the recreating public. Issues identified at these meetings were considered in the BLM planning process to insure that all recreation issues were covered in the RMP. Meetings were also held with Federal, State, and local government personnel to discuss agency concerns relative to recreation. Burley District personnel attended one of these meetings held in the area.

One state park is located in the RMP area. It consists of one 640 acre section of land in the City of Rocks. No development has occurred at this site. Cooperative management of public, Forest Service, and State lands has been considered for this area to insure uniform management.

Idaho Department of Lands

The Idaho Department of Lands administers approximately 28,445 acres of land within allotments in the RMP areas. These lands are distributed among many allotments. They are leased by livestock operators for grazing on ten-year terms. Personnel from the Department of Lands attended a meeting in Oakley, Idaho, in June 1980, at which the range inventory methodology was explained.

Idaho Department of Health and Welfare

BLM entered into a cooperative agreement in September 1979 with the Idaho Department of Health and Welfare, with a common objective of protecting water and air resources within the State. The agreement provides for information exchange and agency coordination involving State water and air quality problems.

University of Idaho

Cooperative Extension Service. Extension Range Economist provided assistance in developing the methodology for developing the ranch budgets and provided input and review into those budgets. Extension Range Specialist held workshops (primarily for range users) in Malta and Oakley, Idaho, in April 1981, to inform people of how they, as interested and concerned citizens, could become involved in the RMP process. BLM personnel assisted with these meetings.

Point Springs Rangeland Experiment Station. Located on public land in the Point Springs Allotment (5326), considerable rangeland research has been done at the experiment station. BLM utilized portions of this research data, primarily information on yearling use, in developing current actual use and stocking levels for this and associated allotments.

City of Oakley

BLM Hydrologist met and worked with the City of Oakley in locating and identifying those springs on public land which are part of the City of Oakley domestic water supply. The City's concerns over the continued availability of this water source were identified and the Preferred Alternative includes protection of these springs.

Shoshone-Bannock Indian Tribe

No reservation lands lie within the RMP area. BLM has met with the Shoshone-Bannock Tribal Council to apprise them of the RMP process and the issues being addressed by the plan; to determine the concerns of the tribe; to become familiar with plans and policies of the Tribal Council which may need to be considered in the RMP; to assure the Tribal Council that consideration will be given these plans and policies if they are germane in the development of the RMP; and to provide for Tribal input into the development of the RMP.

League of Women Voters of Idaho

The League of Women Voters Education Fund entered into a contract with the Bureau aimed at improving the usefulness and scope of public participation in the planning and decision-making process. The League of Women Voters of Idaho assisted with the Cassia RMP public involvement process - expanding the Cassia mailing list from 290 organizations and individuals to 800, held three public issue identification meetings (in Malta, Oakley, and Burley, Idaho) in March 1981, developed an issue survey and analyzed the results of the survey, and developed brochures for public distribution on the BLM planning process and the Cassia RMP.

Burley District Advisory Council

The Burley District Advisory Council participated in a review of the preliminary draft RMP/EIS with the focus on RMP alternatives and environmental consequences. They reviewed this material and provided feedback to the Burley

District staff, including a preferred alternative. This information was used in finalizing the environmental consequences chapter of the EIS and in developing the Bureau's Preferred Resource Management Plan for the Cassia RMP area.

CASSIA RMP MAILING LIST

The following list includes governmental agencies with jurisdiction and expertise, as well as organizations and individuals potentially affected by land-use decisions in Cassia County.

Elected Officials, Federal

Senator James McClure
Senator Steven Symms
Congressman George Hansen

Federal Agencies

Department of Agriculture
Soil Conservation Service
U. S. Forest Service
Department of Energy
Bonneville Power Administration
Department of Interior
Bureau of Indian Affairs
Bureau of Land Management
Boise Field Solicitors Office
Bureau of Mines
Bureau of Reclamation
Fish and Wildlife Service
Geological Survey
Minerals Management Service
National Park Service
Department of Transportation
Federal Aviation Administration
Environmental Protection Agency
National Advisory Council on
Historic Preservation

Elected Officials, State

Honorable John V. Evans
Governor, State of Idaho
Deputy Attorney General, State of Idaho
Senator Denton Darrington
Senator John T. Peavey
Representative Steve Antone
Representative J. Vard Chatburn
Representative Ernest Hale
Representative Mack W. Neibaur

State Agencies

Bureau of Mines and Geology

Department of Fish and Game
Department of Health and Welfare
Division of Environment
Department of Lands
Department of Parks and Recreation
Department of Transportation
Idaho Aeronautics and Public
Transportation
Department of Water Resources
Idaho State Clearinghouse
Idaho State Police
Idaho State Sheep Commission
State Historic Preservation Officer
University of Idaho
Agri-Econo Department
College of Forestry, Wildlife, and
Range
Extension Range Economist
Extension Range Specialist

Local Government

Cassia County Commissioners
Cassia County Extension Agent
Cassia County Waterways Commission
City of Burley Parks Department
City of Burley Recreation Department
Mayor, City of Albion
Mayor, City of Burley
Mayor, City of Declo
Mayor, City of Malta
Mayor, City of Oakley
Oneida County Commissioners
Power County Commissioners
Shoshone-Bannock Tribal Council
Tribal Fish and Game Officer
Twin Falls County Commissioners

Organizations

Albion Telephone Co.
American Fisheries Society
American Mining Congress
Amoco Production Co.

Anaconda Copper
 Atlantic Richfield
 Auto Phone Corp.
 Belliston Bros. Apiaries
 Burley Bowmen
 Burley Chamber of Commerce
 Burley Highway District
 Burley Trap Club
 Cassia County Historical Society
 Chevron Pipeline Co.
 Committee for Idaho's High Desert
 Conoco Inc.
 ESL/UURI
 Eugene Television, Inc.
 Homestake Mining Co.
 Idaho Carey Act Development Assoc.
 Idaho Cattlemen's Association
 Idaho Conservation League
 Idaho Mining Assoc.
 Idaho Power Co.
 Idaho State Field Trial Assoc.
 Idaho State Historical Society
 Idaho Wildlife Federation
 Idaho Wool Growers Assoc.
 Independent Petroleum Assoc.
 Intermountain Gas Co.
 League of Women Voters
 Magic Valley Trail Machine
 Mountain State Telephone and Telegraph
 Mt. Harrison Snowmobile Club
 National Audubon Society
 National Outdoor Coalition
 National Wildlife Federation
 Natural Resources Defense Council
 Northwest Pipeline Co.
 Oakley Highway District
 Oregon Trail Muzzleloaders
 Pocatello Trail Machine Assoc.
 Project Mutual Telephone Coop Assoc.
 Public Lands Institute
 Raft River Electric
 Raft River Highway District
 Resource Development Assoc.
 Rupert Chamber of Commerce
 Sierra Club
 Snake River Alliance
 South Central Idaho Livestock Assoc.
 Southeast Idaho Rod and Gun Club
 Texaco, Inc.
 The Institute of Ecology
 The Wildlife Society
 Unity Light and Power
 West Cassia Soil Conservation District
 Western Land Exchange
 Wilderness Society
 Wildlife Management Institute

All appropriate news media

Individuals

Glen Allen
 Ken Ames
 Mrs. Dick Anderson
 Jay Anderson
 Neil Anderson
 Joe Ballard
 Walt Baltzer
 Richard Bauer
 Bill Beck
 Bob Bell
 James Bell
 Clarence Bellum
 Jim Bennett
 Sheldon Bluestein
 Mike Boltz
 Aldrich Bowler
 Patrick A. Bowman
 Richard M. Boyd
 Alan Brauer
 Adelle Brim
 Bud Brinegar
 D. Michael Broadhead
 Leola Bryant
 Lou Bucklin
 Tom Bush
 B. Robert Butler
 H. W. "Chris" Cagle
 Don Campbell
 Stan Campbell
 Bill & Judy Carder
 Earl H. Carlson
 David Chadwick
 Walt and Norma Charles
 Dan W. Christopherson
 Dick Cook
 Angelo Colianni
 Tom Coonts
 Rich Cone
 Roy and Doris Couch
 Tim and Erica Craig
 C. L. "Red" Cramer, Jr.
 R. Hilton Critchfield
 Glade Davis
 Ivan Dayley
 Lindsey W. Dimond
 Larry Drexler
 Lud Drexler
 Mark Druss
 James D. Egbert
 Vaughn M. Erikson
 Jack Erickson
 John Faulkner

Gene Federico
Thomas R. Flores
Dave Fortier
Alice M. Fosha
Gregory M. Franzwa
H. Paul Friesema
Ernie Gadsby
Sally Gibson
Kenneth M. Goldsmith
Donald Grandjean
Roy Hancock
Dave Hanks
Jarvis Hazen
Les L. Hazen
William F. Hazen
Toni Hill
Vaughn Hobson
Paula Hollifield
Karl Holte
Beth & Garr Hovey
Roger Howarth
Marti Howell
Florin H. Hulse
Charles Hyer
Jim Ingalls
M. W. Jackson
Jerry Jayne
Robert Johnson
Dick Jordan
Al Kempton
Max Kuwana
Ernie LaMiller
Morgana Lampe'
Douglas C. Laumann
Stan Lloyd
Dan Lowder
Terry Martin
Jackie Johnson Maughn
Ralph Maughn
David Mead
William R. Meiners
Stanley D. Melton
Garland Metcalf
Sharon Metzler
Vernon Miller
Steve Miller
Ed Mitchell
John Moeller
Mark Moorman
Daniel Moss
Cindy Moyle
Lee Moyle
Stu Murrell
Rosella Neddo
Carl Nellis
John C. Nichols
Don Noble

James Norman
G. L. "Pete" Olson
Clair Ousler
Jenkin Palmer
Tom Palmer
Robert Parke
Bill Patterson
Marilyn Patterson
Max Pavesic
Robert A. Pettygrove
Ennis Pickett
Mike Poulton
Nick Purdy
Mel Quale
John Quan
Dee Rasmussen
Dallen Reese
Clair & Virginia Rickettes
R. J. Rich
Glen A. Roberts
Paula Rosa
Fred Rose
Jeff Rupercht
Claude Saylor
Don, Gerald, and Jim Scarrow
Henry T. Schodde
Fred Schmidt
Ivan Schrenk
Lee Sharpe
Jim Sinclair
Andrew T. Smith
Jim L. Sorenson
Bud Stackler
Claude Stevens
H. Robert Stradley
William V. Studebaker
Charles W. Thompson
Charles Trost
Gary Turner
C. L. Twitchell
Neal Twitchell
Jerry Tydeman
Edward Vaughn
Art Ward
Ron Watters
Don Westfall
Jim Wickel
Blaine Wight
Lanny Willis
Jim Wood
Bessie M. Wright
Callis B. Young
Asiel Zollinger
Don Zuck
All grazing permittees in the
Cassia RMP area.

GLOSSARY

ACTUAL LIVESTOCK USE. The use (in AUMs) made of forage on an area without reference to permitted or recommended use.

ADJUDICATED GRAZING PRIVILEGES. That amount of forage production on a particular unit of federal range that is apportioned to range users following a formal process that includes application by the users for grazing privileges, determination of the qualifications for grazing privileges of the applicants, apportionment among applications of the forage production within the proper grazing season and capacity of that unit of federal range, and acceptance by the applicants of the grazing privileges based upon the apportionment or its substantiation in a decision by an examiner or the Interior Board of Land Appeals upon appeal.

ALLOTMENT MANAGEMENT PLAN (AMP). A documented program which applies to livestock operations on the public lands and which is prepared in careful and considered consultation, cooperation, and coordination with the permittee(s) or lessee(s) and others involved. It prescribes the manner in and extent to which livestock operations will be conducted in order to meet the multiple use and sustained yield objectives as determined in the resource management plan.

ANIMAL UNIT MONTH (AUM). The amount of forage (800 lb. dry weight) required to sustain the equivalent of 1 cow, 1 horse, 5 sheep, 5.3 deer, or 9.4 antelope for one month.

APPARENT TREND. See trend.

ASSET MANAGEMENT INITIATIVE/PROGRAM. Through Executive Order #12348, the President established the Property Review Board which directed all Federal agencies to review the assets under their jurisdiction and identify those that were excess to federal needs. In the Bureau of Land Management (Department of Interior), this program is referred to as the Asset Management Initiative and involves identifying both real property and public land that is no longer necessary to meet management objectives.

AVERAGE LICENSED GRAZING USE. The arithmetic mean (average) of authorized (or licensed) grazing in AUMs over a particular time period.

BASE PROPERTY. Land that has the capability to produce crops or forage that can be used to support authorized livestock for a specified period of the year.

BENEFIT/COST ANALYSIS. An analytical approach that compares alternative costs with alternative benefits over a specified time period to determine which land use option gives the best return on expenditures. Commonly depicted as a ratio of benefit divided by costs.

BEST MANAGEMENT PRACTICES. A practice or combination of practices that are the most effective and practical (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals.

CAPITOL VALUE. The value at which assets (grazing privileges) can be sold.
Market value.

CARRYING CAPACITY. The maximum use rate possible without inducing damage to vegetation or related resources. Carrying capacity relates to livestock numbers, wildlife numbers, recreational use, etc.

CLASS II CULTURAL RESOURCE INVENTORY. A sample-oriented field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites within a portion of a defined area in a manner which will allow an objective estimate of the nature and distribution of cultural resources in the entire defined area.

CLEAN AIR ACT. A series of Congressional acts and amendments requiring the establishment of air quality standards and national standards for air pollution control. The general intent is to "protect and enhance the quality in the Nation's air resource."

CLIMAX PLANT COMMUNITY. The culminating stage in plant succession for a given site where the vegetation has reached a highly stable condition.

COLD WATER BIOTA. Flora and fauna which require a cold water (70°F or less) habitat for survival.

CONDITION.

- Ecologic condition. The present state of the vegetation on a range site in relation to the climax (natural potential) plant community for that site.
- Range Condition. The current productivity of a range relative to what that range is naturally capable of producing.
- Seeding Condition. The amount and productivity of seeded species measured in terms of maximizing production of forage for livestock. Considers the amount of reinvading shrub species in the treatment area.

COOPERATIVE FARM AGREEMENT. An administrative agreement between the BLM and individuals (negotiated by Idaho Fish and Game) which permits farming on public lands with the understanding that certain portions of the farmed area shall be left unharvested to provide wildlife habitat.

COORDINATED RESOURCE MANAGEMENT PLAN. A plan developed cooperatively by appropriate State and Federal agencies to formulate a resource management program that integrates and makes provision for all resource values and uses within the selected geographical area.

CRITICAL GROUNDWATER AREA. Several groundwater basin areas within the State of Idaho have been developed to the extent that no new rights can be initiated. These basins have been closed, pursuant to state law, because development has drastically lowered the water table. Drilling wells or any additional development is allowed only to fill existing water rights or for domestic use and stock watering.

CRUCIAL HABITAT. Habitat which is absolutely basic to maintaining viable populations of fish, wildlife, or plants during certain seasons of the year or specific reproduction periods.

CULTURAL RESOURCE CLEARANCE. A statement by a competent professional historian or archaeologist as to whether or not any known cultural resources will be adversely affected by an undertaking and requires that such a statement be based on the results of an appropriate investigation directed at determining if and where cultural resources exist in the vicinity of an undertaking.

CULTURAL RESOURCE SITE. A physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites which are recorded as cultural resources have sociocultural or scientific values and meet the general criterion of being more than 50 years old.

DESERT LAND ACT/ENTRY. Passed in 1877 and subsequently amended, this act allows a state resident to file a patent application on up to 320 acres of public land with the intent of developing said land for cultivated agriculture.

DEVELOPED RECREATION SITE. See Recreation.

DISPERSED RECREATION. See Recreation.

DISTANCE ZONE. The area that can be seen from a travel route as foreground-middleground (up to 3-5 miles), background (from foreground-middleground up to 15 miles), and areas which are seldom seen.

ECOLOGIC CONDITION. See Condition.

ECOLOGIC NICHE. The "ecologic niche" consists of where an organism lives, what it does (how it transforms energy, behaves, responds to and modifies its physical and biotic environment), and how it is constrained by other species.

ECOLOGIC RANGE SITE. A distinctive kind of rangeland, which in the absence of abnormal disturbance and physical site deterioration, has the potential to support a native plant community typified by an association of species different from that of other sites. This differentiation is based upon significant differences in kind or proportion of species, or total productivity.

ECONOMIC EFFICIENCY. The usefulness of inputs (costs) to produce outputs (benefits) and effects when all costs and benefits that can be identified and valued are included in the computations. Economic efficiency is usually measured using present net value, though use of benefit-cost ratios and rates-of-return may sometimes be appropriate.

ENVIRONMENTAL ASSESSMENT (EA). A concise public document prepared to provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. It includes a brief discussion of the need for the proposal, alternatives considered, environmental impact of the proposed action and alternatives, and a list of agencies and persons consulted.

ERODIBILITY. Susceptibility of soil to erosion.

FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA). Public Law 94-579 signed by the President on October 21, 1976. Establishes public land policy for management of lands administered by the Bureau of Land Management. FLPMA specifies several key directions for the Bureau, notably that: management be on the basis of multiple use and sustained yield; land use plans be prepared to guide management actions; public lands be managed for the protection, development, and enhancement of resources; public lands be retained in Federal ownership; and public participation be utilized in reaching management decisions.

FIRE MANAGEMENT. The protection and enhancement of the resources of the public lands through use of fire as a management tool.

- Limited Suppression. A policy that considers areas where fire control is extremely difficult or where the values threatened do not warrant the expenses associated with maximum suppression procedures.
- Maximum Suppression. Immediate aggressive action is taken on all new fires on or threatening public lands.
- Prescribed or Prescription Burns. Fires burning under conditions that have previously been determined to be beneficial and that meet land management objectives.

43 CFR 3809. Regulations which provide for mineral entry, exploration, location, operations, and purchase pursuant to the mining laws and in a manner that will assume that unnecessary and undue degradation do not occur and that protection is afforded nonmineral resources. It also provides for reclamation of disturbed areas. These regulations pertain to locatable minerals only.

GRAZING PREFERENCE. The total number of animal unit months of livestock on public lands apportioned and attached to base property owned or controlled by a permittee or lessee.

GRAZING SYSTEMS. Systematic sequences of grazing use and non-use of an allotment to reach or maintain identified multiple-use goals or objectives by improving or maintaining the quality and quantity of the vegetation.

HABITAT MANAGEMENT PLAN (HMP). A written and approved activity plan for a geographical area of public lands which identifies wildlife habitat management actions to be implemented in achieving specific objectives related to RMP/MFP planning document decisions.

INFILTRATION RATE. The rate at which water enters the surface soil.

INTRUSION. A feature (land and water form, vegetation, or structure) which is generally considered out of context because of excessive contrast and disharmony with the characteristic landscape.

K FACTOR. A numerical expression of potential soil erodibility.

KNOWN GEOTHERMAL RESOURCE AREA (RAFT RIVER KGRA). An area in which the geology, nearby discoveries, competitive interests and other indicia would, in the opinion of the Secretary (of the Interior), engender a belief in men who are experienced in the subject matter that the prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose. Some 27,500 acres (including 18,620 acres of public land) approximately 10 miles southwest of Malta are so designated.

LAND REPORT. A written report that documents the physical, environmental, social, and economic factors used in making land use decisions on all lands or rights-of-way actions.

LEASABLE MINERALS. See Minerals.

LIMITED SUPPRESSION. See Fire Management.

LITHIC SCATTER. Stone debris left as the result of tool manufacturing or reshaping.

LOCATABLE MINERALS. See Minerals.

MAXIMUM SUPPRESSION. See Fire Management.

MINERALS.

- Leasables. Types of minerals, such as coal, oil, oil shale, gas, phosphate, sodium, potash, and geothermal resources, whose prospecting and development on public lands under permit or lease was authorized by the Minerals Leasing Act of 1920, as amended and supplemented.
- Locatables. Precious or semi-precious minerals that are not considered to be common variety minerals. Locatable mineral deposits can be claimed and the mining claim patented, thus converting it to private ownership. These minerals are covered by the Mining Law of 1872.
- Salables. Mineral materials such as common varieties of sand, stone, gravel, cinders, pumice, pumicite, and clay that may be acquired under the Materials Act of 1947, as amended.

MINING LAW OF 1872. An act which authorized placer and lode mining claims, mill sites, and tunnel sites of specific dimensions. Requires \$100 worth of work be done on each claim every year.

MIGRATION ROUTES. Areas traversed on a periodic basis by mule deer in moving between summer range and winter range.

MITIGATING MEASURES. Actions to avoid, minimize, reduce, eliminate, or rectify the impact of a management practice.

MULTIPLE USE. The management of all the resources of the public lands so that they are utilized in the combination that will best meet the needs of the American people.

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969. A Congressional Act which establishes a national environmental policy. The goal of the act is to improve the quality of the human environment by procedurally requiring all Federal agencies to give equal and complete consideration to environmental values in all their decision making activities.

NATIONAL HISTORIC LANDMARK. Areas of major national historic and cultural significance designated by the Secretary of the Interior (by authority of the Historic Sites Act of 1935). The program is administered by the National Park Service. Dominant objective of the designation is management of the resource for its historic values.

NATIONAL HISTORIC TRAILS (OREGON TRAIL). Extended trails which follow as closely as possible and practical the original trails or routes of travel of national historical significance. Their purpose is the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. (The National Trail System Act, as amended.)

NATIONAL NATURAL LANDMARK. A specific area designated by the Secretary of the Interior (by authority of the Historic Sites Act of 1935) which contains a representative example(s) of the nation's natural history, including terrestrial or aquatic communities, landforms, geological features, or habitats of native plant and animal species, possessing national significance in illustrating or interpreting the nation's natural heritage.

NATIONAL REGISTER OF HISTORIC PLACES. The official list, established by the Historic Preservation Act of 1966, of the Nation's cultural resources worthy of preservation. The Register lists archaeological, historic, and architectural properties (i.e., districts, sites, buildings, structures, and objects) nominated for their local, State, or national significance by State and/or Federal agencies and approved by the National Register staff. The Register is maintained by the National Park Service.

NATURAL AREA. Areas of outstanding scenic quality, natural wonder, or scientific importance that merit special attention and care in management to insure their preservation in their natural condition.

NESTING/BROOD-REARING AREAS (HABITAT). Localized areas used by some species of the grouse family for nesting and raising of young chicks (broods).

NET PRESENT WORTH. A measure of the discounted worth (value) of an alternative, determined by subtracting the present worth of alternative costs from the present worth of alternative benefits.

NON-POINT POLLUTION. Refers to area sources of water pollution, such as livestock grazing or off-road vehicle use, in contrast to a point source such as an outlet from a factory.

NON-RENEWABLE RESOURCE. Resources whose total physical quantity does not increase significantly over time. Non-living materials such as minerals and fuels.

NOTICE OF INTENT. Required under 43 CFR 3809. When surface disturbance of five acres or less per year at a mining operation will occur, a written notice must be sent to BLM 15 days prior to starting the operation. The notice describes the operation and its location and must contain a statement that the lands will be reclaimed to the standards spelled out in the regulations.

OPEN SPACE SCENIC AREA. An area that provides exceptional scenic quality and/or scenic vistas that merit special management attention to insure their protection from visual intrusions.

ORDER 3 SOIL SURVEY. A low intensity or scale of soil mapping. In mapping soil landscapes, soil mapping unit lines are drawn as nearly as possible to the natural landscape. Resulting soil mapping units are, therefore, relatively large (generally 40 plus acres) and made up of various soil series, associations, and complexes.

PERMEABILITY. The porosity of a soil or its ability to transmit water or gases.

PLAN OF OPERATION. Required by 43 CFR 3809 for mining operations where surface disturbance will exceed five acres per year or where operations are proposed in specially designated areas (wild and scenic rivers, ACECs, wilderness areas, areas closed to or with restricted ORV access, or areas withdrawn from mining where valid existing rights are being exercised). The plan must describe the entire operation including equipment, location of access, support facilities, drill sites, measures to prevent unnecessary or undue degradation, and reclamation plans. The plan of operation must be approved by the BLM authorized officer.

PLANT PHENOLOGY. The study of periodic biological phenomenon such as flowering, seeding, etc., especially as related to climate.

PLOT TREND. See Trend.

PRESCRIBED OR PRESCRIPTION BURN. See Fire Management.

PREY BASE. The collection of prey species in an area that are used as a food source for a predator or group of predators.

RANCH CONSOLIDATION. The merger of two or more ranching operations.

RANGE CONDITION. See Condition.

RECLAMATION STIPULATIONS. Special conditions included in mineral leases, permits, plans of operations, etc., which require that reasonable measures be taken to prevent unnecessary or undue degradation of the public lands, including resloping land disturbed by operations to an appropriate contour and, where necessary, revegetating disturbed areas.

RECREATION.

- Developed Recreation Sites. Distinctly defined area where facilities are provided for concentrated public use, e.g., campgrounds, picnic areas, and boat launches.
- Dispersed Recreation. Recreation of various kinds that occurs generally throughout a large area and is not confined to a specific place, e.g., hunting, hiking, ORV use, and horseback riding.

RECREATION AND PUBLIC PURPOSES ACT. A Congressional act which authorizes the Secretary of the Interior, under specific conditions, to sell or lease public domain lands to State and local governments for recreation and other public purposes and to qualified non-profit organizations for public and quasi-public purposes, including recreation, education, and health.

RECREATION AREA MANAGEMENT PLAN (RAMP). A written and approved activity plan for a geographical area of public lands which identifies recreation management actions to be implemented in achieving specific objectives related to RMP/MFP planning document decision. An RAMP is required for each area designated a Special Recreation Management Area.

RENEWABLE RESOURCES. Resources whose supply regenerate themselves over time. Use of these resources can continue indefinitely provided they are managed under a sustained yield philosophy. Living organisms and others such as soil and water which are closely associated with and affected by living organisms.

RESOURCE MANAGEMENT PLAN (RMP). A land use plan as prescribed by the Federal Land Policy and Management Act which establishes allowable resource uses and related levels of production or use to be maintained within the concepts of multiple use and sustained yield.

RESOURCE THRESHOLDS. Specific defined levels of resource use, production, or development which are established as maximum or minimum constraints in the resource management plan.

RETURNS ABOVE CASH COSTS. Revenue in excess of that required to cover the cash costs of ranch operations (i.e., feed, interest on operating capital, overhead, etc.).

SALABLE MINERALS. See Minerals.

SEEDING CONDITION. See Condition.

SENSITIVITY LEVEL. As applied to visual resource management, that degree of concern expressed by the user toward scenic quality and existing or proposed visual change in a particular characteristic landscape.

SIKES ACT. Public Law 93-4452, passed by the United States Congress on October 18, 1974, directs the Secretary of the Interior to cooperate with the State wildlife agencies in the planning, development, maintenance, and coordination of comprehensive plans for the conservation and rehabilitation of fish and wildlife resources.

SOIL COMPACTION. The process by which soil is packed tightly, losing its porosity.

SOIL PRODUCTIVITY. Capacity of a soil to produce vegetation. The amount produced will vary according to plant species and management practices.

SPECIAL RECREATION MANAGEMENT AREA (SRMA). An area where congressionally recognized recreation values exist or where significant public recreation issues or management concerns occur. Special or more intensive management is typically needed. Detailed recreation planning is required in these areas and greater managerial investment is likely.

STRATIFICATION. Layering of artifacts within a cultural resource site. If the site is undisturbed, the oldest artifacts are the deepest in the soil strata with the most recent artifacts nearest the surface.

STREAM HABITAT CONDITION RATINGS. A method used to evaluate the condition of the aquatic habitat of streams. Six factors are evaluated - stream shade, condition of streambank vegetation, streambank stability, stream channel stability, sedimentation of streambed, and instream cover - resulting in an overall rating of the habitat between unsuitable and excellent.

STRUTTING GROUNDS. Localized areas used by some species of the grouse family to display their courtship rituals.

SUITABILITY. The capability of forage-producing land to be grazed on a sustained yield basis without damage to the basic resources of the area or to adjacent areas.

SUSPENDED NON-USE. That portion of grazing preference that has been suspended and for which active grazing use will not be reauthorized until additional forage is available for livestock grazing on a sustained yield basis.

SUSTAINED YIELD. The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use.

TAYLOR GRAZING ACT OF 1934. Implemented to stop injury to the public grazing lands by preventing overgrazing and soil deterioration. It authorized the Secretary of Interior to manage the public rangelands.

THERMAL COVER. Vegetation used by deer for shelter. It may include saplings, shrubs, or trees at least 5 feet tall with up to 75 percent crown cover.

THREATENED OR ENDANGERED SPECIES. Endangered species are any species which are in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined to constitute a pest. Threatened species are any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

TOTAL DISCOUNTED BENEFITS/COSTS. Total sum of the stream of benefits or costs accrued by an alternative after discounting to adjust for the time value of money. (Discounting is the converse of growth in value due to accrued interest; money spent or received in the future has less value today since that money could be invested at some interest rate).

TRAVEL ZONE (GOOSE CREEK). A scenic corridor along the Goose Creek Road between Wilson Pass and the Utah border where special visual considerations are required to preserve the scenic quality of the area.

TREND.

- Apparent Trend. A one-time observation (of a representative area of vegetation type) which considers plant vigor, seedlings, surface litter, and soil movement, and which compares the vegetative composition of the natural potential (climax community) of the area.
- Plot Trend. A method employing periodic measurements and photographs of vegetation within a selected plot of land to assess range trend on a long-term basis.

UNIVERSAL SOIL LOSS EQUATION (USLE). An erosion model designed to compute average soil losses from sheet and rill erosion under specified conditions.

UTILIZATION. The proportion of current year's forage production that was consumed or destroyed by grazing animals, usually expressed as a percentage.

WILDLIFE LEAVE AREAS. Areas within land treatments which are not treated, providing wildlife cover and increasing the diversity of habitat types.

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LIST OF PREPARERS

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<p>Margaret Beason Word Processor Operator</p>	<p>Word processor operator in the Burley District for three and one-half years, having worked on three environmental impact statements. Presently functions as District personnel clerk.</p> <p>Typed all material for the plan and EIS. Assisted with editing and text layout.</p>
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Burley District Manager
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Has held variety of positions with BLM for 32 years, the last 11 as Burley District Manager.

Responsible for finalizing the Preferred Alternative, incorporating public review and recommendations of the Burley District Advisory Council. Provided general project supervision and review.

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Two years as Forest Research Technician, North Central Forest Experiment Station, Carbondale, Illinois; one year as Soil Scientist, USDA Soil Conservation Service Greenville, Illinois; three and one-half years as BLM Burley District Staff Forester.

Directed an inventory of the pinyon-pine resource; interpreted results of an Order 3 Soil Survey; predicted allotment specific erosion rates for each RMP/EIS alternative using the USLE equation.

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Agricultural Economist
B. S. Agricultural
Economics

Has eight years with BLM, serving as Administrative Assistant, Rawlins District for one and one-half years, Regional Economist; Rawlins District for one and one-half years; Agricultural Economists, BLM Idaho State Office for the past five years.

Prepared an economic overview of the planning area. Conducted public meetings to gather data to prepare ranch budgets. Prepared the economics portion of the EIS.

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District Staff Geologist
B. S. Geology

One year as Geologist with the Army Corps of Engineers; two years Senior Logging Geologist with Exploration Logging Of USA Inc.; three years with the BLM Burley District Office as Geologist.

Conducted an inventory of locatable and leasable minerals and supervised a sand and gravel inventory of the planning area.

Prepared the minerals portion of the EIS.

Mikel Haase
Environmental Specialist
B. A. Environmental
Design
M. S. Forest Resources

Three and one-half years seasonal employment in park maintenance and visitor control with the Washington State Parks. Five years with the Burley District-two and one-half years as Staff Recreation Specialist and two and one-half years as Environmental Specialist.

Completed a visual resource inventory of the RMP area. Authored Alternatives chapter of the RMP/EIS. Assisted with editing RMP/EIS, glossary development, index preparation, general document lay-out, and other phases of manuscript preparation. Provided technical coordination during the EIS process.

Tim Hartzell
Planning and Environmental Staff Leader
B. S. Geography
M. S. Natural Resource Management

Two years as Land Husbandry Officer, Government of Malawi (Central Africa); one and one-half years as Surface Protection Specialist and one year as Environmental Specialist, BLM Salt Lake District (Utah); seven years in the BLM Burley District as Environmental Staff leader; presently Elko Resource Area Manager in the BLM Elko District (Nevada).

Served as team leader providing direction and coordination for the overall development of the plans from issue identification through preparation of the EIS. Had a primary hand in refining and forming the planning concept and procedures used in developing the RMP. Provided guidance for public involvement. Authored Chapter 1 and conducted substantive editing and rewriting of the remainder of the EIS.

Kirk L. Koch
Watershed Specialist
B. S. Natural Resource Management

One year general watershed/water quality experience with the Salt River Project, Tempe, Arizona; three years as Watershed Specialist, Burley District Snake River Resource Area.

Completed a water rights/water use inventory of the planning area, and assisted with a water quality/water quantity inventory.

Prepared RMP material on water quality, floodplains and aquatic/wetland conditions.

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B. S. Forestry

Three and one-half years as Outdoor Recreation Planner in the BLM Burley District Snake River Resource Area.

Provided visitor use and recreation information. Prepared the recreation and visual resource components of the RMP/EIS.

Sharon LaBrecque
Realty Specialist
B. S. Wildlife
Management

Six months as range conservationist; two and one-half years as Realty Specialist, Burley District Snake River Resource area.

Completed the lands and realty section of the EIS.

Carolyn Taplin
Co-op Education Intern
Senior Range
Management Student

Two summers with the BLM Shoshone District Office conducting vegetation inventories, and condition and trend studies; six months with the Burley District as a member of the Cassia Resource Management planning team.

Co-authored the wildlife and vegetation sections of the Existing Situation Chapter; authored Chapter 5, Consultation and Coordination; completed most maps from which cartographic work was completed.

Richard Wright
District Staff Range
Specialist
B. S. Range Management

Range Conservationist/Natural Resource Specialist for ten years in the Arizona Strip District; three years as District Staff Range Specialist in the Bakersfield District (California); Range Staff Specialist in the Burley District since 1975.

Provided leadership in collection and documentation of range condition, trend and vegetation data; developed forage allocations for Alternatives A, B and C; authored the sections on vegetation and livestock management.

APPENDICES

APPENDIX A

METHODOLOGY FOR PROPOSED STOCKING LEVELS

Proposed stocking levels were completed on an individual allotment basis. Procedures followed prior to determining stocking levels included analysis of six year average use, average utilization, current condition and trend, and consultations with livestock operators. Poor or fair condition, moderate to high utilization, static or downward trend resulted in a proposed decreased stocking level from the six year average use. Conversely, low to moderate utilization, good or excellent condition, static or upward trend resulted in a proposed no change or increased stocking level from the six year average use. After the above analysis, consultation meetings were set up with the livestock operators of each allotment to present the findings and determine a proposed initial or short term stocking level. Wildlife needs, both present and projected, were accounted for prior to determining the proposed livestock needs.

Examples

(Artesian-Kidd Allotment)

I-Initial stocking level - without land treatment (Alternatives B & C)

Items for analysis prior to forage assignment

- a. Six Year Average Use = 231 AUMs
- b. Condition = Good 81%; Fair 17%; Poor 2%
- c. Trend = Up 8%; static 85%; Down 7%
- d. Average Utilization = Low 23%
- e. Active grazing Preference = 385 AUMs
- f. Change in spring turnout = From 4-16 to 5-1 (15 day delay)

After analysis of the above data and consultation with the user it was determined to use a proposed initial stocking level (Active preference) of 385 AUM's. At activity plan implementation this proposed stocking level will be monitored for accuracy.

II-Long-Term stocking level with land treatment (Alternatives B & C)

Artesian-Kidd Allotment (Alternative "C")

Area proposed to be treated -----	500 Acres
Total Federal Land -----	4869 Acres
Short-Term Active Preference -----	385 AUMs
Average capacity of treated area -----	3.5 Ac./AUM

Steps

1. Divide area to be treated by total Federal land.

$$500 \text{ acres} \div 4869 = .1027 \text{ (Rounded)}$$

2. Multiply this quotient by the proposed short term active preference. This product equals the present AUMs on the area proposed to be treated.

$$(.1027) (385 \text{ AUMs}) = 40 \text{ AUMs (Rounded)}$$

3. Subtract product of step 2 from the short-term preference. This difference equals the AUMs on the area not to be treated.

$$385 \text{ AUMs} - 40 \text{ AUMs} = 345 \text{ AUMs}$$

4. Divide the area proposed to be treated by 3.5 Ac/AUM. This equals the projected AUMs on the area to be treated after treatment.

$$500 \text{ acres} \div 3.5 \text{ Ac/AUM} = 143 \text{ AUMs (Rounded)}$$

5. Add the quotient of step 4 to the difference of step 3. This sum equals the projected active preference for the Artesian-Kidd Allotment after land treatment.

$$143 \text{ AUMs} + 345 \text{ AUMs} = 488 \text{ AUMs}$$

III-Protection (Alternative D)

Items for analysis prior to determining the initial stocking level listed under "I" above indicate that most of the allotment is in good condition with an upward or static trend, low utilization, and a delayed spring turnout date. Analysis of these items indicate that with the delayed spring turnout date the six year average use of 231 AUMs would allow for good to excellent condition on the allotment.

TABLE 1

Proposed Forage Use - Alternatives A and B

Management Area No. Name		MIC	(AUMs) Present Livestock Grazing Use (AUMs)			Proposed Active Livestock Grazing Use (AUMs)			Proposed Livestock Use Adjustments (%)		Big Game (AUMs)		Proposed Land Treatment (Acres)	
			6 Year Ave. Use	Preference		Initial	From Land Treatment	Long-Term Goal	From		Mule Deer	Antelope		
				Active	Suspended				Active	6 Year Ave.				
Management Area 1														
4065 Milner-Holyoak	C	151	140	0	140	86	226	0	+ 61	- 7	+ 50	11	0	634
Sub Total		151	140	0	140	86	226	0	+ 61	- 7	+ 50	11	0	634
Management Area 2														
4025 Simon Baker	I	65	65	26	48	0	48	- 26	- 26	- 26	- 26	0	0	0
4032 Dry Creek-Artesian	I	213	227	0	227	22	249	0	+ 10	+ 7	+ 17	173	0	100
4067 Buckhorn-Churchill	I	400	627	0	627	150	777	0	+ 24	+ 57	+ 94	60	0	726
4068 Dry Creek	I	973	729	769	729	111	840	0	+ 15	- 25	- 14	278	0	606
4069 Artesian-Kidd	I	231	385	0	385	124	509	0	+ 32	+ 67	+120	450	0	600
4071 Artesian Kidd Iso.	I	0	0	0	0	0	0	0	0	0	0	0	0	0
4075 Marion Group	I	489	384	0	384	40	424	0	+ 10	- 21	- 13	11	0	200
4081 Cold Spring	I	398	421	382	421	475	896	0	+113	+ 6	+125	180	0	1,977
4087 Churchill-Mullen	I	128	121	0	160	88	248	+ 32	+105	+ 25	+ 94	11	0	550
4094 Churchill-Poulton	I	449	387	0	387	54	441	0	+ 14	- 14	- 2	11	0	300
4110 Pickett-Wake	I	340	789	0	789	0	789	0	0	+132	+132	0	0	0
Sub Total		3,686	4,135	1,177	4,157	1,064	5,221	+ 1	+ 26	+ 13	+ 42	1,174	0	5,059
Management Area 3														
4026 Bruce Bedke-Private	I	193	201	0	201	223	424	0	+111	+ 4	+120	9	0	1,096
4029 Karl E. Bedke-Goose Creek	C	0	40	0	40	30	70	0	+ 75	-	-	4	0	190
4078 Mabey Goose Creek	I	54	54	80	54	3	57	0	+ 6	0	+ 6	38	0	10
4088 Goose Creek-Mullen	I	128	11	0	75	8	83	+582	+655	- 41	- 35	11	0	53
4093 Goose Creek-Poulton	I	558	560	841	560	8	568	0	+ 1	0	+ 2	341	0	40
4099 Beaver Dam	I	210	268	412	268	128	396	0	+ 43	+ 28	+ 89	45	0	744
4100 North Emery	I	95	121	179	121	23	144	0	+ 19	+ 27	+ 52	14	0	80
4103 Shoulder "3" Inc.	I	532	582	872	582	0	582	0	0	+ 9	+ 9	82	0	0
4104 Baker	I	108	138	206	138	19	157	0	+ 14	+ 28	+ 45	34	0	80
4105 Oay	I	26	29	43	29	8	37	0	+ 28	+ 12	+ 42	53	0	40
4111 Warr-Pickett	I	452	492	744	492	107	599	0	+ 22	+ 9	+ 33	45	0	536
Sub Total		2,356	2,496	3,377	2,560	557	3,117	+ 3	+ 25	+ 9	+ 32	676	0	2,869
Management Area 4														
4027 Goose Creek Group	I	5,966	5,471	4,816	5,471	716	6,187	0	+ 13	- 8	+ 4	870	0	7,510
4052 Critchfield-Ind.	C	18	17	0	17	2	19	0	+ 12	- 6	+ 6	5	0	10
4062 Harper-Goose Creek	I	21	21	30	21	25	46	0	+119	0	+119	7	0	112
4070 Worthington Springs	I	152	152	48	152	65	217	0	+ 43	0	+ 43	22	0	474
4089 Goose Creek-Ward	C	11	11	0	11	21	32	0	+191	0	+191	8	0	80
4090 Goose Creek	C	70	70	106	70	0	70	0	0	0	0	14	0	0
4112 Alastra	I	196	195	0	195	0	195	0	0	0	0	22	0	0
4113 Earl Whiteley	I	110	114	0	114	4	118	0	+ 4	+ 4	+ 7	23	0	20
4116 Marchant-Goose Creek	M	278	272	0	272	7	279	0	+ 3	- 2	0	3	0	315
4117 Goose Creek Private #1	I	154	188	0	188	0	188	0	0	+ 22	+ 22	45	0	0
4120 Junction Valley Parcels	C	0	0	0	0	17	17	0	-	0	-	0	0	60
4127 Stone Cabin Iso.	C	10	0	0	10	5	15	-	-	0	+ 50	3	0	23
4134 Robinson Hole	I	0	0	0	0	0	0	0	0	0	0	83	0	0
4140 Birch Creek Parcels	C	0	0	0	0	19	19	-	-	-	-	6	0	65
Sub Total		6,986	6,511	5,000	6,521	881	7,402	0	+14	- 7	+ 6	1,111	0	8,669
Management Area 5														
- - Administrative Site	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Management Area 6														
5007 Water Canyon	I	184	209	209	209	45	254	0	+ 22	+ 14	+ 38	45	0	280
5009 Bridger Canyon	M	101	126	125	126	16	142	0	+ 13	+ 25	+ 41	45	0	80
5010 View	I	47	48	47	34	3	37	- 29	- 23	- 28	- 21	23	0	16
5049 Marsh Creek Iso.	I	0	0	0	0	0	0	0	0	0	0	0	0	0
5052 North Albion	I	0	0	0	0	19	19	0	-	0	-	11	0	65
Sub Total		332	383	382	369	83	452	- 4	+18	+11	+36	124	0	441
Management Area 7														
4028 Bedke-Churchill	I	80	80	0	80	203	283	0	+254	0	+254	38	0	840
4033 Callahan	I	137	138	0	97	104	201	- 30	+ 46	- 29	+ 47	9	0	630
4034 Callahan-Matthews	C	0	0	0	5	0	5	-	-	-	-	4	0	0
4056 Goose Creek-Fairchild	I	221	249	0	98	95	193	- 61	- 22	- 56	- 13	9	0	640
4061 Hedges	I	39	52	0	29	0	29	- 44	- 44	- 26	- 26	7	0	0
4064 Matthews-Churchill	M	15	0	0	15	0	15	-	-	0	0	83	0	0
4080 Martin Goose Creek	I	158	165	0	108	34	142	- 35	- 14	- 32	- 10	5	0	120
4082 Matthews-Goose Creek	I	167	138	0	138	19	157	0	+ 14	- 17	- 6	11	0	160
4083 Willow Creek-Anderson	M	24	23	0	23	0	23	0	0	- 4	- 4	101	0	0
4084 Churchill-Matthews	I	96	60	0	60	236	296	0	+393	- 38	+208	0	0	962
4086 Goose Creek-McIntosh	I	25	27	0	6	8	14	- 78	- 48	- 76	- 44	5	0	40
4115 Big Cedar-Churchill	I	38	38	0	28	54	82	- 26	+116	- 26	+116	60	0	260
4118 Birch Creek	I	128	127	0	127	9	136	0	+ 7	- 1	+ 6	30	0	90
4128 Land Creek Iso.	M	0	0	0	0	0	0	0	0	0	0	0	0	0
4129 Fairchild Canyon	I	4	4	0	4	7	11	0	+175	0	+175	0	0	40
4130 Land Creek	I	65	65	0	65	37	102	0	+ 57	0	+ 57	32	0	250
4131 Mill Creek	M	12	12	0	12	0	12	0	0	0	0	4	0	0
4132 Two Knobs	I	10	0	0	12	0	12	-	-	+ 20	+ 20	0	0	2
5011 Pine Knob	I	48	48	48	48	11	59	0	+ 23	0	+ 23	34	0	67
5012 Lunch Creek	I	112	64	64	112	51	163	+ 75	+155	0	+ 46	341	0	220
5013 Crystal	I	250	148	148	296	0	296	+100	+100	+ 18	+ 18	38	0	0
5014 Marsh Creek	M	23	23	23	23	0	23	0	0	0	0	19	0	0
5015 Howell Creek	I	285	285	50	261	0	261	- 8	- 8	- 8	- 8	30	0	840
5016 Sibley	I	60	60	13	60	147	207	0	+245	0	+245	15	0	724
5017 Conner Creek	I	250	236	237	236	410	646	0	+174	- 6	+158	38	0	2,262
5018 South Conner	M	58	53	0	53	9	62	0	+ 17	- 9	+ 7	15	0	53
5019 Rocky Hollow	I	21	98	99	21	59	80	- 79	- 18	0	+281	15	0	280
5021 Middle Hill	I	581	604	609	604	41	645	0	+ 7	+ 4	+ 11	75	0	720
5022 Grape Creek	I	87	86	87	86	176	262	0	+205	- 1	+201	15	0	916
5023 Cove	I	26	35	34	27	35	62	- 23	+ 77	+ 4	+138	19	0	160
Sub Total		3,020	2,918	1,412	2,729	1,750	4,479	- 6	+ 53	- 10	+ 48	1,052	0	10,276

Management Area 8															
5024	Almo Creek	C	55	52	52	42	0	42	- 19	- 19	- 24	- 24	15	0	0
5025	Graham Creek	I	71	71	31	71	8	79	0	+ 11	0	+ 11	60	0	38
5026	Emery Creek	M	160	161	31	161	9	170	0	+ 6	0	+ 6	15	0	180
5027	Circle Creek	I	38	67	74	67	123	190	0	+184	+ 76	+400	86	0	552
5028	Junction Creek	I	66	66	204	66	0	66	0	0	0	0	23	0	0
5029	Trail Canyon	I	197	196	152	196	0	196	0	0	0	0	21	0	0
5030	Tracy Lane	I	88	77	60	77	0	77	0	0	- 13	- 13	37	0	0
5031	Heath Canyon	I	0	0	0	0	16	16	0	- -	0	- -	38	0	55
5032	Smoky Mountain	I	58	58	41	46	0	46	- 21	- 21	- 21	- 21	18	0	0
5033	Moulton	I	56	56	56	56	9	65	0	+ 16	0	+ 16	2	0	61
5034	State Line	I	42	75	9	14	73	87	- 81	+ 16	- 67	+107	2	0	305
5035	Sparks Basin	I	228	228	0	195	74	269	- 14	+ 18	- 14	+ 18	45	0	400
5036	Junction Seeding	I	584	490	296	490	106	596	0	+ 22	- 16	+ 2	86	0	505
5053	Almo	C	0	0	0	10	0	10	- -	- -	- -	- -	5	0	0
Sub Total			1,643	1,597	1,006	1,491	418	1,909	- 7	+ 20	- 9	+ 16	453	0	2,096
Management Area 9															
5020	Idahome Iso.	I	46	0	0	0	223	223	0	- -	-100	+385	0	0	780
5037	Almo Flat	M	253	218	183	253	10	263	+ 16	+ 21	0	+ 4	0	0	143
5038	Cole Lane	M	131	112	0	131	2	133	+ 17	+ 19	0	+ 2	5	0	20
5039	Gully	I	245	246	296	250	523	773	+ 2	+214	+ 2	+216	11	0	2,269
5040	Johnson Creek	I	75	75	75	75	271	346	0	+361	0	+361	11	0	1,087
5041	E-Y Flat	I	777	766	0	766	326	1,092	0	+ 43	- 1	+ 41	11	0	2,574
5042	George Creek	I	109	121	87	121	551	672	0	+455	+ 11	+517	34	0	2,279
5043	Narrows Seeding	I	493	461	466	493	97	590	+ 6	+ 27	0	+ 20	11	4	618
5044	State Spring	I	49	61	61	51	51	102	- 16	+ 67	+ 4	+108	19	0	216
5045	Clear Creek	I	586	567	523	567	2,335	2,902	0	+412	- 3	+395	11	19	10,137
5046	Ward E-Y	I	19	0	0	0	206	206	0	- -	-100	+984	0	0	721
5047	South Bridge	I	0	0	0	0	302	302	0	- -	0	- -	0	0	1,056
5048	Naf	I	0	78	79	78	0	150	0	+ 92	- -	- -	11	0	0
5050	Glen	I	45	45	0	27	0	27	- 40	- 40	- 40	- 40	0	0	0
5320	Warm Creek	I	3,855	3,867	0	3,867	1,249	5,116	0	+ 32	0	+ 33	23	32	10,001
5326	Point Springs	M	4,050	1,847	0	4,050	449	4,499	+119	+144	0	+ 11	11	4	1,573
5328	Point	M	1,696	2,131	0	2,131	237	2,368	0	+ 11	+ 26	+ 40	15	13	1,989
5330	Sandrock	I	817	915	0	741	16	757	- 19	- 17	- 9	- 7	45	0	310
5331	Bridge	M	1,135	1,115	0	1,135	808	1,943	+ 2	+ 74	0	+ 71	23	6	4,255
5332	Strevel	I	133	162	265	162	259	421	0	+160	+ 22	+271	60	2	1,000
5333	Green Canyon	I	10	0	0	0	126	126	0	- -	-100	+1,160	26	0	442
5336	Raft River Iso. #2	I	0	0	0	0	148	148	0	- -	0	- -	11	0	518
5338	Sublett Road Triangle	I	0	0	0	0	29	29	0	- -	0	- -	0	0	103
5339	H P & P	I	0	0	0	0	34	34	0	- -	0	- -	0	0	118
5340	Round Mountain	I	0	0	0	0	85	85	0	- -	0	- -	0	3	296
5341	Valley	I	0	0	0	0	91	91	0	- -	0	- -	0	3	320
5342	Railroad Grade	C	0	0	0	0	0	0	0	- -	0	- -	0	0	0
5343	Landing Field	I	0	0	0	0	71	71	0	- -	0	- -	0	0	247
5344	OOE	I	0	0	0	0	112	112	0	- -	0	- -	0	0	393
5345	Strip	I	0	0	0	0	80	80	0	- -	0	- -	0	0	280
5346	Cemetery	I	0	0	0	0	46	46	0	- -	0	- -	0	0	160
5347	Idahome Interchange	I	0	0	0	0	0	0	0	- -	0	- -	0	0	0
Sub Total			14,524	12,792	2,033	14,898	8,809	23,707	+ 16	+ 85	+ 3	+ 63	338	86	43,905
Management Area 10															
5003	Jim Sage	I	3,663	3,838	3,840	3,838	5,881	9,719	0	+153	+ 5	+165	1,613	6	25,800
5004	Cassia Creek	I	696	697	693	697	59	756	0	+ 8	0	+ 8	67	0	550
5005	Almo-Womack	I	757	768	472	768	62	830	0	+ 8	+ 1	+ 10	67	0	600
5006	Chokecherry	I	131	153	154	153	25	178	0	+ 16	+ 17	+ 36	6	0	320
5051	Keogh	I	0	0	0	0	184	184	0	- -	0	- -	9	0	644
Sub Total			5,247	5,456	5,159	5,456	6,211	11,667	0	+114	+ 4	+122	1,762	6	27,914
Management Area 11															
5001	North Cotterel	I	1,246	1,428	252	1,428	499	1,927	0	+ 35	+ 15	+ 55	169	6	3,509
5002	South Cotterel	I	2,611	3,241	561	3,241	351	3,593	0	+ 11	+ 24	+ 38	592	13	2,000
5057	Weigh Station	I	0	0	0	0	0	0	0	0	0	0	7	3	0
Sub Total			3,857	4,669	813	4,669	851	5,520	0	+ 18	+ 21	+ 43	768	22	5,509
Management Area 12															
5301	Highway Common	M	4,358	4,471	0	6,126	15	6,141	+ 37	+ 37	+ 41	+ 41	90	25	1,000
5303	West Toews	I	126	100	0	210	0	210	+110	+110	+ 67	+ 67	9	0	0
5304	East Toews	I	78	62	0	70	0	70	+ 13	+ 13	+ 10	+ 10	11	6	0
5305	Kunau	M	3,780	1,675	0	3,780	29	3,809	+126	+127	0	+ 1	11	2	100
5306	No Mans Land	M	211	0	0	0	414	414	0	- -	-100	+ 96	11	3	291
5307	Basalt Seeding	M	18	0	0	0	719	719	0	- -	-100	+3,894	11	3	397
5308	Raft River	I	837	1,113	0	1,113	18	1,131	0	+ 2	+ 33	+ 35	11	3	200
5309	Yale	M	1,303	1,087	0	1,303	0	1,303	+ 20	+ 20	0	0	12	3	0
Sub Total			10,711	8,508	0	12,602	1,195	13,797	+ 48	+ 62	+ 18	+ 29	166	45	1,988
Management Area 13															
5313	Chapin	I	115	276	0	276	406	682	0	+147	+140	+493	169	0	2,275
5314	Dairy Springs	I	920	904	0	904	79	983	0	+ 9	- 2	+ 7	656	0	426
5315	Warm Springs	I	525	530	0	530	16	546	0	+ 3	+ 1	+ 4	345	0	332
5321	Antelope	I	339	422	230	422	225	647	0	+ 53	+ 24	+ 91	131	8	1,313
5322	Shirley Creek	M	38	38	0	38	94	132	0	+247	0	+247	30	0	409
5323	North Lake Fork	M	147	148	0	148	69	217	0	+ 47	+ 1	+ 48	54	0	414
5324	South Lake Fork	I	164	175	0	175	42	217	0	+ 24	+ 7	+ 32	48	0	341
5325	Sublett	I	116	117	0	117	18	135	0	+ 15	+ 1	+ 16	47	0	137
5327	Meadow Creek	I	2,568	2,853	0	2,853	145	2,998	0	+ 5	+ 11	+ 17	601	0	2,000
5328	Point	M	762	957	0	957	106	1,063	0	+ 11	+ 26	+ 40	142	0	893
5348	Burnt Canyon	I	0	0	0	0	0	0	0	0	0	0	9	0	0
Sub Total			5,694	6,420	230	6,420	1,200	7,620	0	+ 19	+ 13	+ 34	2,232	8	8,540
Management Area 14															
4025	Simon Baker	I	35	35	14	26	0	26	- 26	- 26	- 26	- 26	0	0	0
4094	Churchill-Poulton	I	25	20	0	20	5	25	0	+ 25	- 20	0	0	0	0
4133	Churchill Tracts	C	49	49	0	92	8	100	0	+ 9	+ 88	+104	0	0	30
5054	Idahome Wildlife	C	0	0	0	0	0	0	0	0	0	0	0	0	0
5310	Gifford Springs	C	0	0	0	0	0	0	0	0	0	0	29	0	0
5311	Horse Butte	C	0	0	0	0	0	0	0	0	0	0	7	0	0
5312	Raft River Iso. #1	C	0	0	0	0	0	0	0	0	0	0	0	0	0
5337	Raft River Iso. #3	I	0	0	0	0	0	0	0	0	0	0	0	0	0
1031	Golden Valley Iso. Tract	C	0	0	0	0	0	0	0	0	0	0	11	0	0
1032	Churchill Tract	C	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total			109												

M, I, C refers to the management potential of grazing allotments. Allotments are categorized for the purpose of distributing funds in a manner that will achieve range improvement in the most cost efficient manner.
M = Maintain I = Improve C = Custodial

See Planning Criteria, Chapter 1, pages 7 through 9.

TABLE 2

Proposed Forage Use - Alternative C

Management Area No. Name		MIC	Present Livestock Grazing Use (AUMs)			Proposed Active Livestock Grazing Use (AUMs)			Proposed Livestock		Use Adjustments (%)		Big Game (AUMs)		Proposed Land Treatment (Acres)
			6 Year Ave. Use	Preference Active	Suspended	Initial	From Land Treatment	Long-Term Goal	From Active	Preference Long-Term	6 Year Ave. Initial	From Long-Term	Mule Deer	Ante- lope	
Management Area 1															
4065 Milner-Holyoak	C		151	140	0	140	27	167	0	+ 19	- 7	+ 11	11	0	200
Sub Total			151	140	0	140	27	167	0	+ 19	- 7	+ 11	11	0	200
Management Area 2															
4025 Simon Baker	I		65	65	26	48	0	48	- 26	- 26	- 26	- 26	0	0	0
4032 Dry Creek-Artesian	I		213	227	0	227	22	249	0	+ 10	+ 7	+ 17	255	0	100
4067 Buckhorn-Churchill	I		400	627	0	627	120	747	0	+ 19	+ 57	+ 87	120	0	580
4068 Dry Creek	I		973	729	769	729	92	821	0	+ 13	- 25	- 16	484	0	500
4069 Artesian-Kidd	I		231	385	0	385	103	488	0	+ 27	+ 67	+ 111	540	0	500
4071 Artesian Kidd Iso.	I		0	0	0	0	0	0	0	0	0	0	0	0	0
4075 Marion Group	I		489	384	0	384	40	424	0	+ 10	- 21	- 13	18	0	200
4081 Cold Spring	I		398	421	382	421	337	758	0	+ 80	+ 6	+ 90	293	0	1,400
4087 Churchill-Mullen	I		128	121	0	160	51	211	+ 32	+ 74	+ 25	+ 65	11	0	320
4094 Churchill-Poulton	I		449	387	0	387	54	441	0	+ 14	- 14	- 2	24	0	300
4110 Pickett-Wake	I		340	789	0	789	0	789	0	0	+ 132	+ 132	0	0	0
Sub Total			3,686	4,135	1,177	4,157	819	4,976	+ 1	+ 20	+ 13	+ 35	1,745	0	3,900
Management Area 3															
4026 Bruce Bedke-Private	I		193	201	0	201	153	354	0	+ 76	+ 4	+ 83	14	0	750
4029 Karl E. Bedke-Goose Creek	C		0	40	0	40	0	40	0	0	- -	- -	9	0	0
4078 Mabey Goose Creek	I		54	54	80	54	0	54	0	0	0	0	72	0	0
4088 Goose Creek-Mullen	I		128	11	0	75	8	83	+ 581	+ 655	- 41	- 35	11	0	50
4093 Goose Creek-Poulton	I		558	560	841	560	0	560	0	0	0	0	570	0	0
4099 Beaver Dam	I		210	268	412	268	55	323	0	+ 21	+ 28	+ 54	56	0	320
4100 North Emery	I		95	121	179	121	0	121	0	0	+ 27	+ 27	18	0	0
4103 Shoulder "3" Inc.	I		532	582	872	582	0	582	0	0	+ 9	+ 9	135	0	0
4104 Baker	I		108	138	206	138	19	157	0	+ 14	+ 28	+ 45	48	0	80
4105 Day	I		26	29	43	29	0	29	0	0	+ 12	+ 12	87	0	0
4111 Warr-Pickett	I		452	492	744	492	107	599	0	+ 22	+ 9	+ 33	56	0	536
Sub Total			2,356	2,496	3,377	2,560	342	2,902	+ 3	+ 16	+ 9	+ 23	1,076	0	1,736
Management Area 4															
4027 Goose Creek Group	I		5,966	5,471	4,816	5,471	586	6,057	0	+ 11	- 8	+ 2	1,163	0	6,150
4052 Critchfield-Ind.	C		18	17	0	17	0	19	0	0	- 6	- 6	5	0	0
4062 Harper-Goose Creek	I		21	21	30	21	18	39	0	+ 86	0	+ 86	9	0	80
4070 Worthington Springs	I		152	152	48	152	44	196	0	+ 29	0	+ 29	34	0	320
4089 Goose Creek-Ward	C		11	11	0	11	0	11	0	0	0	0	12	0	0
4090 Goose Creek	C		70	70	106	70	0	70	0	0	0	0	18	0	0
4112 Alastra	I		196	195	0	195	0	195	0	0	- 1	- 1	27	0	0
4113 Earl Whiteley	I		110	114	0	114	0	114	0	0	+ 4	+ 4	22	0	0
4116 Marchant-Goose Creek	M		278	272	0	272	3	275	0	+ 1	- 2	- 1	3	0	120
4117 Goose Creek Private #1	I		154	188	0	188	0	188	0	0	+ 22	+ 22	56	0	0
4120 Junction Valley Parcels	C		0	0	0	0	0	0	0	0	0	0	0	0	0
4127 Stone Cabin Iso.	C		10	0	0	10	0	10	- -	- -	0	0	5	0	0
4134 Robinson Hole	I		0	0	0	0	0	0	0	0	0	0	134	0	0
4140 Birch Creek Parcels	C		0	0	0	0	0	0	0	0	0	0	7	0	0
Sub Total			6,986	6,511	5,000	6,521	651	7,172	0	+ 10	- 7	+ 3	1,495	0	6,670
Management Area 5															
- Administrative Site	-		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Management Area 6															
5007 Water Canyon	I		184	209	209	209	45	254	0	+ 22	+ 14	+ 38	45	0	280
5009 Bridger Canyon	M		101	126	126	126	16	142	0	+ 13	+ 25	+ 41	45	0	80
5010 View	I		47	48	47	34	0	34	- 29	- 29	- 28	- 28	23	0	0
5049 Marsh Creek Iso.	I		0	0	0	0	0	0	0	0	0	0	0	0	0
5052 North Albion	I		0	0	0	0	19	19	0	- -	0	- -	11	0	65
Sub Total			332	383	382	369	80	449	- 4	+ 17	+ 11	+ 35	124	0	425
Management Area 7															
4028 Bedke-Churchill	I		80	80	0	80	109	189	0	+ 136	0	+ 136	38	0	450
4033 Callahan	I		137	138	0	97	66	163	- 30	+ 18	- 29	+ 19	11	0	400
4034 Callahan-Matthews	C		0	0	0	5	0	5	- -	- -	- -	- -	5	0	0
4056 Goose Creek-Fairchild	I		221	249	0	98	63	156	- 63	- 37	- 58	- 29	11	0	400
4061 Hedges	I		39	52	0	29	0	29	- 44	- 44	- 25	- 26	11	0	0
4064 Matthews-Churchill	M		15	0	0	15	0	15	- -	- -	0	0	113	0	0
4080 Martin Goose Creek	I		158	165	0	108	0	108	- 35	- 35	- 32	- 32	5	0	0
4082 Matthews-Goose Creek	I		167	138	0	138	14	152	0	+ 10	- 17	- 9	14	0	120
4083 Willow Creek-Anderson	M		24	23	0	23	0	23	0	0	- 4	- 4	135	0	0
4084 Churchill-Matthews	I		96	60	0	60	123	183	0	+ 205	- 37	+ 90	0	0	500
4086 Goose Creek-McIntosh	I		25	27	0	6	8	14	- 78	- 48	- 76	- 44	5	0	40
4115 Big Cedar-Churchill	I		38	38	0	28	33	61	- 26	+ 61	- 26	+ 61	79	0	160
4118 Birch Creek	I		128	127	0	127	9	136	0	+ 7	- 1	+ 6	33	0	90
4128 Land Creek Iso.	M		0	0	0	0	0	0	0	0	0	0	0	0	0
4129 Fairchild Canyon	I		4	4	0	4	7	11	0	+ 175	0	+ 175	0	0	40
4130 Land Creek	I		65	65	0	65	23	88	0	+ 35	0	+ 35	47	0	160
4131 Mill Creek	M		12	12	0	12	0	12	0	0	0	0	5	0	0
4132 Two Knobs	I		10	0	0	12	0	12	- -	- -	+ 20	+ 20	0	0	0
5011 Pine Knob	I		48	48	48	48	0	48	0	0	0	0	37	0	0
5012 Lunch Creek	I		112	64	64	112	34	146	+ 75	+ 128	0	+ 30	394	0	150
5013 Crystal	I		250	148	148	296	0	296	+ 100	+ 100	+ 18	+ 18	70	0	0
5014 Marsh Creek	M		23	23	23	23	0	23	0	0	0	0	23	0	0
5015 Howell Creek	I		285	285	50	261	- 12	249	- 8	- 13	- 8	- 13	33	0	500
5016 Sibley	I		60	60	13	60	61	121	0	+ 102	0	+ 102	15	0	300
5017 Conner Creek	I		250	236	237	236	181	417	0	+ 77	- 6	+ 67	45	0	1,000
5018 South Conner	M		58	53	0	53	9	62	0	+ 17	- 9	+ 7	18	0	53
5019 Rocky Hollow	I		21	98	99	21	59	80	- 79	- 19	0	+ 281	18	0	280
5021 Middle Hill	I		581	604	609	604	36	640	0	+ 6	+ 4	+ 10	90	0	625
5022 Grape Creek	I		87	86	87	86	77	163	0	+ 90	- 1	+ 87	15	0	400
5023 Cove	I		26	35	34	27	17	44	- 23	+ 26	+ 4	+ 69	27	0	80
Sub Total			3,020	2,918	1,412	2,729	917	3,646	- 6	+ 25	- 10	+ 21	1,297	0	5,748

Management Area 8															
5024	Almo Creek	C	55	52	52	42	0	42	- 19	- 19	- 24	- 24	15	0	0
5025	Graham Creek	I	71	71	31	71	8	79	0	+ 11	0	+ 11	78	0	38
5026	Emery Creek	M	160	161	31	161	5	166	0	+ 3	+ 1	+ 4	18	0	100
5027	Circle Creek	I	38	67	74	67	45	112	0	+ 67	+ 76	+194	132	0	200
5028	Junction Creek	I	66	66	204	66	0	66	0	0	0	0	27	0	0
5029	Trail Canyon	I	197	196	152	196	0	196	0	0	- 1	- 1	27	3	0
5030	Tracy Lane	I	88	77	60	77	0	77	0	0	- 12	- 12	52	2	0
5031	Heath Canyon	I	0	0	0	0	0	0	0	0	0	0	49	3	0
5032	Smoky Mountain	I	58	58	41	46	0	46	- 21	- 21	- 21	- 21	23	0	0
5033	Moulton	I	56	56	56	56	9	65	0	+ 16	0	+ 16	5	0	61
5034	State Line	I	42	75	9	14	42	56	- 81	- 25	- 67	+ 33	5	0	175
5035	Sparks Basin	I	228	228	0	195	74	269	- 14	+ 18	- 14	+ 18	66	5	400
5036	Junction Seeding	I	584	490	296	490	63	553	0	+ 13	- 16	+ 5	103	10	300
5053	Almo	C	0	0	0	10	0	10	- -	- -	- -	- -	5	0	0
Sub Total			1,643	1,597	1,006	1,491	246	1,737	- 7	+ 9	- 9	+ 6	605	23	1,274
Management Area 9															
5020	Idahome Iso.	I	46	0	0	0	223	223	0	- -	-100	+385	0	0	780
5037	Almo Flat	M	253	218	183	253	7	260	+ 16	+ 19	0	+ 3	0	0	100
5038	Cole Lane	M	131	112	0	131	0	131	- 15	- 15	0	0	5	0	0
5039	Gully	I	245	246	296	250	276	526	+ 2	+114	+ 2	+115	16	10	1,200
5040	Johnson Creek	I	75	75	75	75	225	300	0	+300	0	+300	14	3	900
5041	E-Y Flat	I	777	766	0	766	326	1,092	0	+ 43	- 1	+ 41	16	10	2,574
5042	George Creek	I	109	121	87	121	435	556	0	+360	+ 11	+410	40	3	1,800
5043	Narrows Seeding	I	493	461	466	493	86	579	+ 6	+ 24	0	+ 17	14	13	550
5044	State Spring	I	49	61	61	51	51	102	- 16	+ 67	+ 4	+108	23	0	216
5045	Clear Creek	I	586	567	523	567	1,157	1,724	0	+207	- 3	+197	13	51	5,025
5046	Ward E-Y	I	19	0	0	0	91	91	0	- -	-100	+379	0	5	320
5047	South Bridge	I	0	0	0	0	302	302	0	- -	0	- -	0	13	1,056
5048	Naf	I	0	78	79	78	0	78	0	+ 0	- -	- -	16	3	0
5050	Glen	I	45	45	0	27	0	27	- 40	- 40	- 40	- 40	0	2	0
5320	Warm Creek	I	3,855	3,867	0	3,867	999	4,866	0	+ 26	0	+ 26	22	38	8,000
5326	Point Springs	M	4,050	1,847	0	4,050	307	4,357	+119	+136	0	+ 8	11	13	1,073
5328	Point	M	1,696	2,131	0	2,131	156	2,287	0	+ 7	+ 26	+ 35	15	64	1,311
5330	Sandrock	I	817	915	0	741	16	757	- 19	- 17	- 9	- 7	79	6	310
5331	Bridge	M	1,135	1,115	0	1,135	532	1,667	+ 2	+ 50	0	+ 47	45	44	2,800
5332	Strevell	I	133	162	265	162	194	356	0	+119	+ 22	+168	68	19	750
5333	Green Canyon	I	10	0	0	0	43	43	0	- -	-100	+330	38	0	150
5336	Raft River Iso. #2	I	0	0	0	0	86	86	0	- -	0	- -	11	0	300
5338	Sublett Road Triangle	I	0	0	0	0	14	14	0	- -	0	- -	0	0	50
5339	H P & P	I	0	0	0	0	14	14	0	- -	0	- -	0	0	50
5340	Round Mountain	I	0	0	0	0	29	29	0	- -	0	- -	0	5	100
5341	Valley	I	0	0	0	0	91	91	0	- -	0	- -	0	3	320
5342	Railroad Grade	C	0	0	0	0	0	0	0	- -	0	- -	0	0	0
5343	Landing Field	I	0	0	0	0	46	46	0	- -	0	- -	0	0	160
5344	OOE	I	0	0	0	0	57	57	0	- -	0	- -	0	0	200
5345	Strip	I	0	0	0	0	80	80	0	- -	0	- -	0	0	280
5346	Cemetery	I	0	0	0	0	46	46	0	- -	0	- -	0	0	160
5347	Idahome Interchange	I	0	0	0	0	0	0	0	0	0	- -	0	0	0
Sub Total			14,524	12,792	2,033	14,898	5,889	20,787	+ 16	+ 63	+ 3	+ 43	446	305	30,535
Management Area 10															
5003	Jim Sage	I	3,663	3,838	3,840	3,838	4,171	8,009	0	+108	+ 5	+119	2,100	108	18,300
5004	Cassia Creek	I	696	697	693	697	48	745	0	+ 7	0	+ 7	79	13	450
5005	Almo-Womack	I	757	768	472	768	36	804	0	+ 5	+ 1	+ 6	93	0	350
5006	Chokecherry	I	131	153	154	153	16	169	0	+ 10	+ 17	+ 29	7	6	200
5051	Keogh	I	0	0	0	0	150	150	0	- -	0	- -	9	0	525
Sub Total			5,247	5,456	5,159	5,456	4,421	9,877	0	+ 81	+ 4	+ 88	2,288	127	19,825
Management Area 11															
5001	North Cotterel	I	1,246	1,428	252	1,428	275	1,703	0	+ 19	+ 15	+ 37	225	32	2,000
5002	South Cotterel	I	2,611	3,241	561	3,241	334	3,575	0	+ 10	+ 24	+ 37	795	127	1,900
5057	Weigh Station	I	0	0	0	0	0	0	0	0	0	0	7	3	0
Sub Total			3,857	4,669	813	4,669	609	5,278	0	+ 13	+ 21	+ 37	1,027	162	3,900
Management Area 12															
5301	Highway Common	M	4,358	4,471	0	6,126	15	6,141	+ 37	+ 37	+ 41	+ 41	101	51	1,000
5303	West Toews	I	126	100	0	210	0	210	+110	+110	+ 67	+ 67	11	0	0
5304	East Toews	I	78	62	0	70	0	70	+ 13	+ 13	+ 9	+ 9	12	13	0
5305	Kunaw	M	3,780	1,675	0	3,780	29	3,809	+126	+127	0	+ 1	11	7	100
5306	No Mans Land	M	211	0	0	0	414	414	0	- -	-100	+ 96	11	6	291
5307	Basalt Seeding	M	18	0	0	0	719	719	0	- -	-100	+3,894	11	7	397
5308	Raft River	I	837	1,113	0	1,113	18	1,131	0	0	+ 33	+ 33	12	6	200
5309	Yale	M	1,303	1,087	0	1,303	0	1,303	+ 20	+ 20	0	0	11	6	0
Sub Total			10,711	8,508	0	12,602	1,195	13,797	+ 48	+ 62	+ 18	+ 29	180	96	1,988
Management Area 13															
5313	Chapin	I	115	276	0	276	214	490	0	+ 78	+140	+326	229	0	1,200
5314	Dairy Springs	I	920	904	0	904	79	983	0	+ 9	- 2	+ 7	1,050	0	426
5315	Warm Springs	I	525	530	0	530	16	546	0	+ 2	+ 1	+ 4	398	0	332
5321	Antelope	I	339	422	230	422	86	508	0	+ 20	+ 24	+ 50	214	8	500
5322	Shirley Creek	M	38	38	0	38	46	84	0	+121	0	+121	45	0	200
5323	North Lake Fork	M	147	148	0	148	41	189	0	+ 28	+ 1	+ 29	79	0	250
5324	South Lake Fork	I	164	175	0	175	42	217	0	+ 24	+ 7	+ 32	61	0	341
5325	Sublett	I	116	117	0	117	18	135	0	+ 15	+ 1	+ 16	63	0	137
5327	Meadow Creek	I	2,568	2,853	0	2,853	145	2,998	0	+ 5	+ 11	+ 17	855	0	2,000
5328	Point	M	762	957	0	957	70	1,027	0	+ 7	+ 26	+ 35	237	0	589
5348	Burnt Canyon	I	0	0	0	0	0	0	0	0	0	0	12	0	0
Sub Total			5,694	6,420	230	6,420	757	7,177	0	+ 12	+ 13	+ 26	3,243	8	5,975
Management Area 14															
4025	Simon Baker	I	35	35	14	26	0	26	- 26	- 26	- 26	- 26	0	0	0
4094	Churchill-Poulton	I	25	20	0	20	0	20	0	0	- 20	- 20	0	0	0
4133	Churchill Tracts	C	49	49	0	92	0	92	0	0	+ 88	+ 88	0	0	0
5054	Idahome Wildlife	C	0	0	0	0	0	0	0	0	0	0	0	0	0
5310	Gifford Springs	C	0	0	0	0	0	0	0	0	0	0	41	0	0
5311	Horse Butte	C	0	0	0	0	0	0	0	0	0	0	7	0	0
5312	Raft River Iso. #1	C	0	0	0	0	0	0	0	0	0	0	0	0	0
5337	Raft River Iso. #3	I	0	0	0	0	0	0	0	0	0	0	0	0	0
1031	Golden Valley Iso. Tract	C	0	0	0	0	0	0	0	0	0	0	11	0	0
1032	Churchill Tract	C	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total			109	147	14	138	0	138	- 6	- 6	+ 27	+ 272			

M, I, C refers to the management potential of grazing allotments. Allotments are categorized for the purpose of distributing funds in a manner that will achieve range improvement in the most cost efficient manner.
M = Maintain I = Improve C = Custodial

See Planning Criteria, Chapter 1, pages 7 through 9.

TABLE 3
Proposed Forage Use - Alternative D

Management Area No. Name		MIC	Present Livestock Grazing Use (AUMs)			Proposed Active Livestock Graz- ing Use (AUMs)		Proposed Livestock Use Adjustments (%)		Big Game (AUMs)	
			6 Year Ave. Use	Preference		Initial/ Long-Term Goal	Active Pref. Initial/Long- Term Goal	6 Yr. Ave. Use Initial/Long- Term Goal	Mule Deer	Ante- lope	
				Active	Suspended						
Management Area 1											
4065	Milner-Holyoak	C	151	140	0	98	- 30	-35	11	0	
	Sub Total		151	140	0	98	-30	-35	11	0	
Management Area 2											
4025	Simon Baker	I	65	65	26	48	- 26	- 26	0	0	
4032	Dry Creek-Artesian	I	213	227	0	185	- 19	- 13	255	0	
4067	Buckhorn-Churchill	I	400	627	0	298	- 52	- 26	120	0	
4068	Dry Creek	I	973	729	769	729	0	- 25	484	0	
4069	Artesian-Kidd	I	231	385	0	231	- 40	0	540	0	
4071	Artesian Kidd Iso.	I	0	0	0	0	0	0	0	0	
4075	Marion Group	I	489	384	0	384	0	- 21	18	0	
4081	Cold Spring	I	398	421	382	263	- 38	- 34	293	0	
4087	Churchill-Mullen	I	128	121	0	100	- 17	- 22	11	0	
4094	Churchill-Poulton	I	449	387	0	386	0	- 14	24	0	
4110	Pickett-Wake	I	340	789	0	340	- 57	0	0	0	
	Sub Total		3,686	4,135	1,117	2,964	- 28	-20	1,745	0	
Management Area 3											
4026	Bruce Bedke-Private	I	193	201	0	155	- 26	- 20	14	0	
4029	Karl E. Bedke-Goose Creek	C	0	40	0	0	-100	0	9	0	
4078	Mabey Goose Creek	I	54	54	80	54	0	0	72	0	
4088	Goose Creek-Mullen	I	128	11	0	74	+673	- 42	11	0	
4093	Goose Creek-Poulton	I	558	560	841	558	0	0	570	0	
4099	Beaver Dam	I	210	268	412	150	- 44	- 29	56	0	
4100	North Emery	I	95	121	179	95	- 21	0	18	0	
4103	Shoulder "3" Inc.	I	532	582	872	355	- 39	- 33	135	0	
4104	Baker	I	108	138	206	108	- 22	0	48	0	
4105	Day	I	26	29	43	10	- 66	- 62	87	0	
4111	Warr-Pickett	I	452	492	744	364	- 26	- 19	56	0	
	Sub Total		2,356	2,496	3,377	1,923	- 23	- 18	1,076	0	
Management Area 4											
4027	Goose Creek Group	I	5,966	5,471	4,816	4,746	- 13	- 20	1,163	0	
4052	Critchfield-Ind.	C	18	17	0	10	- 41	- 44	5	0	
4062	Harper-Goose Creek	I	21	21	30	12	- 43	- 43	9	0	
4070	Worthington Springs	I	152	152	48	152	0	0	34	0	
4089	Goose Creek-Ward	C	11	11	0	11	0	0	12	0	
4090	Goose Creek	C	70	70	106	70	0	0	18	0	
4112	Alastra	I	196	195	0	100	- 49	- 49	27	0	
4113	Earl Whiteley	I	110	114	0	60	- 47	- 45	22	0	
4116	Marchant-Goose Creek	M	278	272	0	272	0	- 2	3	0	
4117	Goose Creek Private #1	I	154	188	0	154	- 18	0	56	0	
4120	Junction Valley Parcels	C	0	0	0	0	0	0	0	0	
4127	Stone Cabin Iso.	C	10	0	0	0	-100	0	5	0	
4134	Robinson Hole	I	0	0	0	0	0	0	134	0	
4140	Birch Creek Parcels	C	0	0	0	0	0	0	7	0	
	Sub Total		6,986	6,511	5,000	5,587	- 14	- 20	1,495	0	
Management Area 5											
- -	Administrative Site	-	- -	- -	- -	- -	- -	- -	- -	- -	
Management Area 6											
5007	Water Canyon	I	184	209	209	164	- 21	- 11	45	0	
5009	Bridger Canyon	M	101	126	126	81	- 36	- 20	45	0	
5010	View	I	47	48	47	34	- 29	- 28	23	0	
5049	Marsh Creek Iso.	I	0	0	0	0	0	0	0	0	
5052	North Albion	I	0	0	0	0	0	0	11	0	
	Sub Total		332	383	382	279	- 27	- 16	124	0	
Management Area 7											
4028	Bedke-Churchill	I	80	80	0	80	0	0	38	0	
4033	Callahan	I	137	138	0	65	- 53	- 53	11	0	
4034	Callahan-Matthews	C	0	0	0	0	0	0	5	0	
4056	Goose Creek-Fairchild	I	221	249	0	93	- 63	- 58	11	0	
4061	Hedges	I	39	52	0	21	- 60	- 46	11	0	
4064	Matthews-Churchill	M	15	0	0	15	-	0	113	0	
4080	Martin Goose Creek	I	158	165	0	100	- 39	- 37	5	0	
4082	Matthews-Goose Creek	I	167	138	0	100	- 28	- 40	14	0	
4083	Willow Creek-Anderson	M	24	23	0	0	-100	-100	135	0	
4084	Churchill-Matthews	I	96	60	0	60	0	- 38	0	0	
4086	Goose Creek-McIntosh	I	25	27	0	6	- 78	- 76	5	0	
4115	Big Cedar-Churchill	I	38	38	0	10	- 74	- 74	79	0	
4118	Birch Creek	I	128	127	0	53	- 58	- 59	33	0	
4128	Land Creek Iso.	M	0	0	0	0	0	0	0	0	
4129	Fairchild Canyon	I	4	4	0	4	0	0	0	0	
4130	Land Creek	I	65	65	0	65	0	0	47	0	
4131	Mill Creek	M	12	12	0	12	0	0	5	0	
4132	Two Knobs	I	10	0	0	0	0	-100	0	0	
5011	Pine Knob	I	48	48	48	35	- 27	- 27	37	0	
5012	Lunch Creek	I	112	64	64	64	0	- 43	394	0	
5013	Crystal	I	250	148	148	148	0	- 41	70	0	
5014	Marsh Creek	M	23	23	23	23	0	0	23	0	
5015	Howell Creek	I	285	285	50	153	- 46	- 46	33	0	
5016	Sibley	I	60	60	13	48	- 20	- 20	15	0	
5017	Conner Creek	I	250	236	237	213	- 10	- 15	45	0	
5018	South Conner	M	58	53	0	41	- 23	- 29	18	0	
5019	Rocky Hollow	I	21	98	99	21	- 79	0	18	0	
5021	Middle Hill	I	581	604	609	400	- 34	- 31	90	0	
5022	Grape Creek	I	87	86	87	56	- 35	- 36	15	0	
5023	Cove	I	26	35	34	26	- 26	0	27	0	
	Sub Total		3,020	2,918	1,412	1,912	- 34	- 37	1,297	0	

Management Area 8										
5024	Almo Creek	C	55	52	52	36	- 31	- 35	15	0
5025	Graham Creek	I	71	71	31	49	- 31	- 31	78	0
5026	Emery Creek	M	160	161	31	112	- 30	- 30	18	0
5027	Circle Creek	I	38	67	74	38	- 43	0	132	0
5028	Junction Creek	I	66	66	204	34	- 48	- 48	27	0
5029	Trail Canyon	I	197	196	152	120	- 39	- 39	27	3
5030	Tracy Lane	I	88	77	60	55	- 29	- 38	52	2
5031	Heath Canyon	I	0	0	0	0	0	0	49	3
5032	Smoky Mountain	I	58	58	41	46	- 21	- 21	23	0
5033	Moulton	I	56	56	56	35	- 38	- 38	5	0
5034	State Line	I	42	75	9	14	- 81	- 67	5	0
5035	Sparks Basin	I	228	228	0	131	- 43	- 43	66	5
5036	Junction Seeding	I	584	490	296	479	- 2	- 18	103	10
5053	Almo	C	0	0	0	0	0	0	5	0
Sub Total			1,643	1,597	1,006	1,149	- 28	- 30	605	23
Management Area 9										
5020	Idahome Iso.	I	46	0	0	0	0	-100	0	0
5037	Almo Flat	M	253	218	183	218	0	- 14	0	0
5038	Cole Lane	M	131	112	0	112	0	- 17	5	0
5039	Gully	I	245	246	296	172	- 30	- 30	16	10
5040	Johnson Creek	I	75	75	75	37	- 51	- 51	14	3
5041	E-Y Flat	I	777	766	0	700	- 9	- 10	16	10
5042	George Creek	I	109	121	87	50	- 59	- 54	40	3
5043	Narrows Seeding	I	493	466	466	400	- 14	- 19	14	13
5044	State Spring	I	49	61	61	39	- 36	- 20	23	0
5045	Clear Creek	l	586	567	523	445	- 22	- 24	13	51
5046	Ward E-Y	I	19	0	0	0	0	-100	0	5
5047	South Bridge	I	0	0	0	0	0	0	0	13
5048	Naf	I	0	78	79	39	- 5	-	16	3
5050	Glen	I	45	45	0	26	- 42	- 42	0	2
5320	Warm Creek	l	3,855	3,867	0	3,481	- 10	- 10	22	38
5326	Point Springs	M	4,050	1,847	0	1,847	0	- 54	11	13
5328	Point	M	1,696	2,131	0	1,094	- 49	- 35	15	64
5330	Sandrock	I	817	915	0	741	- 19	- 9	79	6
5331	Bridge	M	1,135	1,115	0	1,021	- 8	- 10	45	44
5332	Strevel	I	133	162	265	133	- 18	0	68	19
5333	Green Canyon	I	10	0	0	0	0	-100	38	0
5336	Raft River Iso. #2	I	0	0	0	0	0	0	11	0
5338	Sublett Road Triangle	I	0	0	0	0	0	0	0	0
5339	H P & P	I	0	0	0	0	0	0	0	0
5340	Round Mountain	I	0	0	0	0	0	0	0	5
5341	Valley	I	0	0	0	0	0	0	0	3
5342	Railroad Grade	C	0	0	0	0	0	0	0	0
5343	Landing Field	I	0	0	0	0	0	0	0	0
5344	OOE	I	0	0	0	0	0	0	0	0
5345	Strip	I	0	0	0	0	0	0	0	0
5346	Cemetery	l	0	0	0	0	0	0	0	0
5347	Idahome Interchange	l	0	0	0	0	0	0	0	0
Sub Total			14,524	12,792	2,035	10,555	- 17	- 27	446	305
Management Area 10										
5003	Jim Sage	I	3,663	3,838	3,840	2,787	- 27	- 24	2,100	108
5004	Cassia Creek	I	696	697	693	626	- 10	- 10	79	13
5005	Almo-Womack	l	757	768	472	682	- 11	- 10	93	0
5006	Chokecherry	I	131	153	154	131	- 14	0	7	6
5051	Keogh	I	0	0	0	0	0	0	9	0
Sub Total			5,247	5,456	5,159	4,226	- 23	- 19	2,288	127
Management Area 11										
5001	North Cotterel	I	1,246	1,428	252	958	- 33	- 23	225	32
5002	South Cotterel	I	2,611	3,241	561	2,350	- 27	- 10	795	127
5057	Weigh Station	l	0	0	0	0	0	0	7	3
Sub Total			3,857	4,669	813	3,308	- 29	- 14	1,027	162
Management Area 12										
5301	Highway Common	M	4,358	4,471	0	4,358	- 3	0	101	51
5303	West Toews	I	126	100	0	100	0	- 21	11	0
5304	East Toews	I	78	62	0	62	0	- 21	12	13
5305	Kunau	M	3,780	1,675	0	1,675	0	- 56	11	7
5306	No Mans Land	M	211	0	0	0	0	-100	11	6
5307	Basalt Seeding	M	18	0	0	0	0	-100	11	7
5308	Raft River	l	837	1,113	0	837	0	0	12	6
5309	Yale	M	1,303	1,087	0	1,087	- 25	- 17	11	6
Sub Total			10,711	8,508	0	8,119	- 5	- 24	180	96
Management Area 13										
5313	Chapin	I	115	276	0	115	- 58	0	229	0
5314	Dairy Springs	I	920	904	0	904	0	- 2	1,050	0
5315	Warm Springs	I	525	530	0	475	- 10	- 10	398	0
5321	Antelope	I	339	422	230	339	- 20	0	214	8
5322	Shirley Creek	M	38	38	0	38	0	0	45	0
5323	North Lake Fork	M	147	148	0	133	- 10	- 10	79	0
5324	South Lake Fork	I	164	175	0	128	- 27	- 22	61	0
5325	Sublett	I	116	117	0	67	- 43	- 42	63	0
5327	Meadow Creek	I	2,568	2,853	0	1,964	- 31	- 24	855	0
5328	Point	M	762	957	0	491	- 49	- 36	237	0
5348	Burnt Canyon	l	0	0	0	0	0	0	12	0
Sub Total			5,694	6,420	230	4,654	- 28	- 18	3,243	8
Management Area 14										
4025	Simon Baker	I	35	35	14	0	-100	-100	0	0
4094	Churchill-Poulton	I	25	20	0	0	-100	-100	0	0
4133	Churchill Tracts	C	49	92	0	0	-100	-100	0	0
5054	Idahome Wildlife	C	0	0	0	0	0	0	0	0
5310	Gifford Springs	C	0	0	0	0	0	0	41	0
5311	Horse Butte	C	0	0	0	0	0	0	7	0
5312	Raft River Iso. #1	C	0	0	0	0	0	0	0	0
5337	Raft River Iso. #3	I	0	0	0	0	0	0	0	0
1031	Golden Valley Iso. Tract	C	0	0	0	0	0	0	11	0
1032	Churchill Tract	C	0	0	0	0	0	0	0	0
Sub Total			109	147	14	0	-100	-100	59	0
Grand Total			58,316	56,172	20,605	44,774	- 20	- 23	13,596	721

M, I, C refers to the management potential of grazing allotments. Allotments are categorized for the purpose of distributing funds in a manner that will achieve range improvement in the most cost efficient manner.
M = Maintain I = Improve C = Custodial

See Planning Criteria, Chapter 1, pages 7 through 9.

APPENDIX B

Grazing Management and Seasons of Use

Management Area 1		Alternative A		Alternative B, C, D	
No.	Name	From	To	From	To
4065	Milner-Holyoak*	4-13	9-30	4-13	9-30

Management Area 2		Alternative A		Alternative B, C, D	
No.	Name	From	To	From	To
4025	Simon Baker	6-10	7-31	6-10	7-31
4032	Dry Creek-Artesian*	5-4	5-31	5-4	5-31
		11-1	12-1	11-1	12-1
4067	Buckhorn-Churchill*	10-25	11-4	4-16	5-25
		11-13	11-30	10-25	11-30
4068	Dry Creek*	4-16	5-31	4-16	5-25
4069	Artesian-Kidd*	4-16	6-4	5-1	6-15
4071	Artesian Kidd Iso.	5-1	6-15	5-1	6-15
4075	Marion Group*	11-1	11-21	11-1	11-21
		12-1	12-31	12-1	12-31
4081	Cold Spring*	4-15	6-6	4-15	6-6
4087	Churchill-Mullen*	5-1	10-31	5-1	8-31
4094	Churchill-Poulton*	4-15	5-14	4-15	5-14
		12-15	1-14	12-15	1-14
4110	Pickett-Wake*	4-4	5-22	4-4	5-22
		11-1	12-31	11-1	12-31

Management Area 3		Alternative A		Alternative B, C, D	
No.	Name	From	To	From	To
4026	Bruce Bedke-Private*	5-15	5-30	5-15	5-30
		10-23	11-15	10-23	11-15
4029	Karl E. Bedke-Goose Creek	5-1	10-21	5-1	10-21
4078	Mabey Goose Creek*	5-1	5-25	7-1	8-31
4088	Goose Creek-Mullen*	5-1	10-31	9-1	10-31
4093	Goose Creek-Poulton*	5-15	5-30	5-15	5-30
		10-23	11-15	10-23	11-15
4099	Beaver Dam*	5-15	5-30	5-15	5-30
		10-23	11-15	10-23	11-15
4100	North Emery*	5-15	5-30	5-15	5-30
		10-23	11-15	10-23	11-15
4103	Shoulder "3" Inc.*	5-15	5-30	5-15	5-30
		10-23	11-15	10-23	11-15
4104	Baker*	5-15	5-30	5-15	5-30
		10-23	11-15	10-23	11-15
4105	Oay*	5-15	5-30	5-15	5-30
		10-23	11-25	10-23	11-15
4111	Warr-Pickett*	5-1	9-30	5-1	9-30

Management Area 4		Alternative A		Alternative B, C, D	
No.	Name	From	To	From	To
4027	Goose Creek Group**	5-1	10-30	5-1	10-31
4052	Critchfield-Ind.	4-1	4-30	4-1	4-30
4062	Harper-Goose Creek	5-16	6-30	5-16	6-30
4070	Worthington Springs*	5-25	9-24	5-25	9-24
4089	Goose Creek-Ward	7-1	10-15	7-1	10-15
4090	Goose Creek	6-1	11-12	6-1	11-12
4112	Alastra*	6-1	10-20	6-1	10-20
4113	Earl Whiteley*	5-1	7-10	5-1	7-10
4116	Marchant-Goose Creek*	2-1	4-30	2-1	4-30
4117	Goose Creek Private #1	5-16	5-31	5-1	8-1
		7-16	8-18	8-1	10-31
4120	Junction Valley Parcels	N/A	N/A	N/A	N/A
4127	Stone Cabin Iso.	3-1	4-30	3-1	4-30
4134	Robinson Hole	5-1	10-31	5-1	8-1
				8-1	10-31
4140	Birch Creek Parcels	N/A	N/A	N/A	N/A

* Allotment Management Plan or Coordinated Resource Management Plan Proposed
 ** Allotment Management Plan Existing

Management Area 5		Alternative A		Alternative B, C, D	
No.	Name	From	To	From	To
-	-	-	-	-	-

Management Area 6		Alternative A		Alternative B, C, D	
No.	Name	From	To	From	To
5007	Water Canyon	5-1	10-8	5-20	10-27
5009	Bridge Canyon*	5-1	6-30	5-1	6-30
5010	View	6-1	7-6	6-1	7-6
		9-21	10-30	9-21	10-30
5049	Marsh Creek Iso.	-	-	-	-
5052	North Albion	-	-	-	-

Management Area 7		Alternative A		Alternative B, C, D	
No.	Name	From	To	From	To
4028	Bedke-Churchill	4-1	4-30	4-1	4-30
		11-1	11-30	11-1	11-30
4033	Callahan*	4-10	6-15	5-1	6-5
		10-1	11-8	10-1	11-8
4034	Callahan-Matthews	N/A	N/A	3-1	2-28
4056	Goose Creek-Fairchild	4-16	6-27	5-1	6-26
		10-1	11-30		
4061	Hedges	6-1	6-30	6-15	6-24
4064	Matthews-Churchill*	6-11	9-30	6-11	9-30
4080	Martin Goose Creek*	4-16	6-15	5-15	7-12
4082	Matthews-Goose Creek	5-10	10-9	5-20	10-19
4083	Willow Creek-Anderson	10-1	12-31	10-1	12-31
4084	Churchill-Matthews	1-1	3-31	1-1	3-31
4086	Goose Creek-McIntosh	5-1	6-27	6-1	6-30
4115	Big Cedar-Churchill	6-1	7-4	6-15	7-4
		9-26	10-25	9-26	10-25
4118	Birch Creek	7-1	10-31	7-1	10-31
4128	Land Creek Iso.	6-1	9-24	6-1	9-24
4129	Fairchild Canyon	6-1	6-30	6-1	6-30
4130	Land Creek	6-1	9-24	6-1	9-24
4131	Mill Creek	5-1	6-26	5-1	6-26
4132	Two Knobs	4-30	5-5	4-30	5-15
5011	Pine Knob	6-1	11-5	6-1	11-5
5012	Lunch Creek*	5-16	6-22	5-16	6-22
5013	Crystal	5-1	7-30	5-20	10-30
5014	Marsh Creek	6-1	11-20	6-1	8-30
5015	Howell Creek	5-8	9-30	5-20	9-30
5016	Sibley	5-1	9-30	5-16	10-15
5017	Conner Creek*	5-1	9-13	5-1	9-13
5018	South Conner*	5-10	6-25	5-10	6-25
5019	Rocky Hollow	5-20	6-19	5-20	6-19
5021	Middle Hill*	5-1	10-31	5-15	10-31
5022	Grape Creek*	5-1	5-23	5-8	5-31
5023	Cove*	5-15	6-24	5-20	6-29

Management Area 8		Alternative A		Alternative B, C, D	
No.	Name	From	To	From	To
5024	Almo Creek	6-1	10-30	7-11	10-10
5025	Graham Creek*	5-1	9-30	5-1	9-30
5026	Emery Creek	5-16	8-22	6-15	8-22
5027	Circle Creek	4-16	5-30	5-1	6-15
5028	Junction Creek	5-16	7-21	6-1	8-5
5029	Trail Canyon	5-1	9-30	6-1	6-30
5030	Tracy Lane	5-1	5-31	5-5	6-5
5031	Heath Canyon	-	-	-	-
5032	Smoky Mountain	5-1	6-30	5-16	6-30
5033	Moulton	6-1	6-30	6-1	6-30
5034	State Line	5-1	5-31	5-15	6-15
5035	Sparks Basin	5-16	11-15	5-16	10-30
5036	Junction Seeding	5-1	5-31	5-6	6-15
		10-1	10-31	10-1	10-31
5053	Almo	-	-	6-11	7-10

Management Area 9		Alternative A		Alternative 8, C, D	
No.	Name	From	To	From	To
5020	Idahome Iso.	-	-	-	-
5037	Almo Flat*	4-1	4-30	4-1	4-30
		10-1	1-30	10-1	1-30
5038	Cole Lane	9-1	12-15	9-1	12-15
5039	Gully*	2-1	3-29	3-1	3-31
5040	Johnson Creek	12-1	12-31	3-1	3-31
5041	E-Y Flat*	11-1	6-27	11-1	6-27
5042	George Creek*	4-1	6-5	5-20	6-19
5043	Narrows Seeding	5-1	5-31	5-1	5-31
		10-1	10-31	10-1	10-31
5044	State Spring	11-1	11-30	11-1	11-30
5045	Clear Creek*	3-27	6-12	3-27	6-12
		11-1	12-31	11-1	12-31
5046	Ward E-Y	-	-	-	-
5047	South Bridge	-	-	-	-
5048	Naf	5-1	5-30	5-15	5-30
5050	Glen	10-1	12-31	10-1	10-31
5320	Warm Creek*	5-1	12-30	5-1	12-30
5326	Point Springs	5-1	6-15	5-1	6-15
		9-15	11-15	9-15	11-15
5328	Point**	3-1	2-28	3-1	2-28
5330	Sandrock*	5-1	6-15	5-1	6-15
		9-16	10-30	9-16	10-31
5331	Bridge*	4-1	10-20	4-15	10-30
5332	Strevel**	5-15	7-15	5-15	7-15
		10-17	11-16	10-17	11-16
5333	Green Canyon	-	-	-	-
5336	Raft River Iso. #2	-	-	-	-
5338	Sublett Road Triangle	-	-	-	-
5339	H P & P	-	-	-	-
5340	Round Mountain	-	-	-	-
5341	Valley	-	-	-	-
5342	Railroad Grade	-	-	-	-
5343	Landing Field	-	-	-	-
5344	ODE	-	-	-	-
5345	Strip	-	-	-	-
5346	Cemetery	-	-	-	-
5347	Idahome Interchange	-	-	-	-

Management Area 10		Alternative A		Alternative 8, C, D	
No.	Name	From	To	From	To
5003	Jim Sage*	4-1	12-5	4-1	12-5
5004	Cassia Creek*	5-1	6-15	5-1	6-15
		9-1	9-30	10-16	11-15
5005	Almo-Womack*	5-1	6-15	5-1	6-15
		10-16	11-15	10-16	11-15
5006	Chokecherry*	5-1	6-28	5-1	6-28
5051	Keogh	-	-	-	-

* Allotment Management Plan or Coordinated Resource Management Plan Proposed
 ** Allotment Management Plan Existing
 c = cattle s = sheep

Management Area 11		Alternative A		Alternative 8, C, D	
No.	Name	From	To	From	To
5001	North Cottarel*	5-1	10-31	5-20	10-31
5002	South Cottarel**	5-1	11-30	5-1	11-30
5057	Weigh Station	-	-	-	-

Management Area 12		Alternative A		Alternative 8, C, D	
No.	Name	From	To	From	To
5301	Highway Common*	3-1	2-28	3-1	2-28
5303	West Toews	5-1	7-14	4-20	7-19
5304	East Toews	4-1	5-14	9-10	10-9
		10-1	10-24		
5305	Kunau**	4-16	9-15	4-16	9-15
5306	No Mans Land	-	-	-	-
5307	Basalt Seeding	-	-	-	-
5308	Raft River*	4-1	6-10	4-1	6-10
		12-1	2-8	12-1	2-8
5309	Vale*	4-1	5-31	4-1	5-31
		11-10	12-17	11-10	12-17

Management Area 13		Alternative A		Alternative 8, C, D	
No.	Name	From	To	From	To
5313	Chapin	12-3	1-30	12-3	1-30
5314	Oairy Springs	5-1	10-7	5-12	10-18
5315	Warm Springs	5-1	5-31	5-5	6-4
		8-16	10-15	8-16	10-15
5321	Antelope	5-1	10-30	5-20	11-19
5322	Shirley Creek*	6-16	7-15	6-15	9-30
5323	North Lake Fork*	9-16	10-31	6-15	9-30
5324	South Lake Fork	5-1	9-15	5-1	9-15
5325	Sublett	7-1	10-30	7-1	10-30
5327	Meadow Creek*	5-14	10-21	6-15	9-15 c
				5-7	10-29 s
5328	Point**	3-1	2-28	3-1	2-28
5348	Burnt Canyon	-	-	-	-

Management Area 141/		Alternative A		Alternative 8, C, D	
No.	Name	From	To	From	To
4025	Simon Baker	6-10	7-31	6-10	7-31
4094	Churchill-Poulton	4-15	5-14	4-15	5-14
		12-15	1-14	12-15	1-14
4133	Churchill Tracts	4-15	5-18	4-15	4-18
		12-1	1-15	12-1	1-15
5054	Idahome Wildlife	3-27	6-12	3-27	6-12
		11-1	12-31	11-1	12-31
5310	Gifford Springs	-	-	-	-
5311	Horse Butte	-	-	-	-
5312	Raft River Iso. #1	-	-	-	-
5337	Raft River Iso. #3	-	-	-	-
1031	Golden Valley Iso. Tract	-	-	-	-
1032	Churchill Tract	-	-	-	-

1/ No grazing under Alternative 0

APPENDIX C

Resource Monitoring and Evaluation Plan

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
VEGETATION	Condition	All allotments.	Range Condition Guide as outlined in SCS National Range Handbook Section 305.	Percent pounds production compared to climax allowance.	At the end of each grazing cycle for AMP areas or 5 year intervals on other allotments.	Condition reduced by 1 class or 10 % from original reading (if latest reading is less than good or indications are that next reading will be less than good).	\$ 2,800
	Trend	a-All allotments with AMPs. b-Allotments not under an AMP but where adjustments in active preference are proposed.	a & b - Photo Plot Measurement Method (Draft Manual 4430.5) October, 1981.	a & b - Index summary points.	a-Annually for one complete grazing cycle; then after each grazing cycle. b-First, third, and fifth year then on a 5 year basis.	a & b - Downward index summary from base of 10 points.	a & b - \$ 4,500
	Cover	All allotments.	Photo Plot Measurement Method (Draft Manual 4430.5) October, 1981.	Percent of total surface area.	5 year intervals.	Decrease of 5 percentage points from base data.	\$ 650
	Utilization	All allotments.	Key Forage Plant Method (Draft Manual 4423).	Percent of forage plant removed.	Annually (within 10 days after close of each grazing period).	Utilization greater than 40 % on native range; 60 % on seedings.	\$12,900
	Actual Use	All allotments.	Form 4130-5 submitted by live-stock operators.	AUMs.	Annually.	Consider with temperature and precipitation in determining why utilization is at monitored level.	\$ 2,800
	Precipitation	All allotments.	Special site specific precipitation gauges and NOAA* data.	Inches of Precipitation.	Monthly during growing season.	Consider with actual use and temperature in determining why utilization is at monitored level.	\$ 2,800
	Temperature	All allotments.	NOAA* data.	Degrees Fahrenheit.	Monthly during growing season.	Consider with actual use and precipitation in determining why utilization is at monitored level.	NC
WOODLAND PRODUCTS	Actual Use	Sale areas and City of Rocks area.	Ocular reconnaissance.	Site inspection of sale areas looking for excessive removal of trees, erosion, unauthorized road building, and unauthorized cutting.	Minimum of twice a year but each area person who is in the area should note activities, check permits, and report any overuse to the area manager.	Overuse of a specific cutting area.	\$ 6,000
	Christmas trees/cords sold	District Office.	Records search.	Dollars received, cords sold, and number of permits.	Bi-monthly and annually at the end of the year.	Use above the sustained yield harvest level.	\$ 3,000
WILDLIFE	Mule Deer: Population trends, distribution, and harvest	Management areas - 2, 3, 4, 7, 8, 9, 10, 11, 12, 13.	Aerial surveys in pre-determined areas. Sex and age ratios. IOF&G hunter check stations and questionnaires.	Number of big game animals.	Cooperatively with IOF&G when funds are available. Trend counts every other year. Need composition annually.	Trend in big game population characteristics which appear to be unusual.	\$ 3,000
	Habitat condition and trend	Management areas - 2, 4, 10, 13.	Permanent browse production and utilization transects and pellet group counts.	Percent of annual growth and number of pellet groups.	Annually.	50% deviation (+ or -) in utilization and deer day use per acre from expected for a period of 3 years.	\$ 2,700
	Antelope/Mule Deer: Fawning habitat parameters to identify crucial areas and season of use	Management areas - 2, 3, 4, 8, 9, 10, 11, 12, 13.	Field surveys.	Habitat characteristics.	Annually, fawning season.	When new data reveals other fawning areas or components of habitat which are important for fawning.	\$ 2,600
	Bald Eagle: Population trends/winter roost site utilization	Management area - 14.	Field surveys.	Number of bald eagles.	Annually, winter.	Change in local land uses that cause a reduction in bald eagle winter use habitat.	\$ 2,600

* National Oceanic and Atmospheric Administration

Ferruginous Hawk: Population trend and nest occupancy.	Management areas - 9, 10, 11, 14.	Field surveys.	Number of hawks and nest sites.	Annually, June & July.	25% decrease in nesting numbers or 50% nest failure.	\$ 2,700
Pheasant: Population trend, distribution, and harvest	Management area - 14.	Ground surveys on pre-determined routes, brood counts, sex ratios counts, and crowing counts by IOF&G. IOF&G hunter bag checks, check stations, and questionnaires.	Number of pheasants.	Annually.	Trend in pheasant population characteristics which appear to be abnormal.	NC
Sage Grouse: Strutting ground use and distribution of grouse	Management areas - 2, 4, 7, 9, 10, 11, 13.	Aerial and ground surveys in pre-determined areas. Strutting ground counts, brood counts, and wing samples by IOF&G.	Number of strutting grounds and strutting males.	Cooperatively with IOF&G when funds are available. Annually.	5% reduction in strutting grounds used and/or strutting males per year for a 3 year period.	\$ 5,500
Fish: Population trend and distribution	Clyde Creek, Dry Creek, East Fork Dry Creek, Middle Fork Dry Creek, Cold Creek.	Fish surveys on pre-determined streams using the electroshocker.	Number and kind of fish per stream.	Annually.	Trend in fish numbers and composition which appear to be abnormal.	\$ 1,600

WATERSHED AND SOILS

Water Quality: Water temp. Coliform Bacteria Alkalinity pH Dissolved O ₂ Sediments Invertebrates Turbidity Water discharge	Dry Creek, Birch Creek, Cold Creek, Howell Creek, Blue Hill Creek, Raft River.	Methods detailed in Cassia monitoring plan. Bacteria, sediments, and turbidity collected in sample bottles and analyzed in a commercial laboratory.	Variable.	Establish a continuous 2 year baseline, then sample biennially, 3 creeks one year, 3 the next. Sample in spring and fall.	Water quality parameters exceeding recommended State of Idaho standards.	\$ 150/ stream/ year
Heavy Metal Content: lead, mercury, cyanide, silver	Birch Creek.	Water samples analyzed in lab.	Parts per million.	Sample biannually (in spring and fall).	Contaminants (from silver mines in Utah) persisting at levels exceeding State of Idaho standards. Notify Salt Lake District, Idaho Department of Health and Welfare, Division of Environment, and EPA.	\$ 200/ year
Wetland/ Riparian Areas: Woody utilization	Same as for water quality + Coe Creek, Goose Creek, Warm Creek.	100 pace transects.	% utilization of woody plants.	After use periods annually.	Livestock utilization greater than 25% on woody plants.	\$ 300/ year
Vegetative composition and trend	Same as above.	Nested frequency transects.	% cover, composition, trend.	Biennially.	Will provide data to substantiate livestock impacts on long-term riparian productivity.	\$ 300/ year
Extent of wetland/ riparian area	Same as above.	Low level photography.	Cover, vegetation, and channel movement.	Once every 5 years.	A 15% reduction in extent of wetland/ riparian areas.	\$3,000/ 5 years
Stream stability	Same as above.	BLM technical note 6671.	Relative numerical scale.	Triennially.	Provides a relative measure of channel stability numerically and photographically allowing interpreter to infer impact origin and recommend mitigation.	\$ 100/ year
Critical Floodplains: Peak flows	Meadow Creek, Warm Creek, Shirley Creek, One Mile Creek, Beaverdam Creek.	Crest stage gauges and photo documentation of floods and damages	Maximum water depth in channel.	After floods.	Will give data indicating severity, intensity, and frequency of floods so systems to utilize flood water to improve range and channel condition can be developed.	\$ 200/ year
Soil Erosion: Land treatments	Goose Creek area.	USLE interpretation using precipitation and nested frequency cover data.	Tons/Acre/Year.	Baseline prior to treatment, then biennially.	Data compared with untreated like area should reveal the success of treatment in stabilizing soils.	\$ 200/ year

General trends	Management Areas - 3, 4, 8, 9, 10, 11. Cultural Resource Specialist will aid in selecting sites in Management Areas 3, 4.	Transects will be 100 ft. long - steel tape between two posts. Measure micro-relief on down-slope side of tape. Photograph each plot. If a rill meter is used, set meter on stationary rods at specific monitoring sites where rills are evident.	Tons/Acre/Year.	Once yearly for 6 years, then triennially.	Mitigation measures, such as lower stocking rates, measures to achieve better livestock distribution, installation of erosion control devices, should be initiated if erosion increase of 10% or more are identified.	\$ 3,000
ORV caused	Management Areas - 3, 6, 10, 11 - where effects of ORV use are apparent. These may include ORV trails and hill climb areas.	Transects on selected ORV trails. Transects will bisect the trail and be long enough to gain sufficient data on ORV caused erosion for each trail. Measurements as in general trends.	Tons/Acre/Year.	Once yearly for 6 years. Biennially thereafter.	Mitigation measures, such as installation of erosion control structures, limiting future use, or closing trails, should be initiated if erosion increases of 10% or more are identified.	\$ 2,500
Soil Compaction: Livestock caused	Areas where new livestock watering troughs will be installed.	Bulk density samples collected with surface core sampler. Samples taken at specific locations prior to and after trough placement. Photograph each site.	grams/cm ³ converted to lbs/ft ³ .	Once before trough placement and once for 5 years depending on the grazing system and amount of use.	These studies will indicate how detrimental the compaction problem is. Information may be used to determine if additional troughs are needed to reduce compaction impacts. In addition, data will be obtained indicating those soils that are more subject to compaction impacts.	\$ 1,500
ORV caused	Management areas 3, 6, 10, 11. Selected existing and potential ORV trails.	Bulk density samples collected with core sampler. Samples taken in and adjacent to existing ORV trails and where new routes will be located, prior to and after establishment. Photograph each site.	grams/cm ³ converted to lbs/ft ³ .	Once biennially on selected, existing ORV trails. Once before opening new ORV routes and once biennially after use begins.	Severe compaction and resulting loss of soil structure indicates if mitigation such as closing and rehabing an area should be initiated. Data will indicate what soils are more subject to ORV caused compaction impacts.	\$ 1,000

CULTURAL RESOURCES

Site trampling	Livestock caused site trampling	Selected sites, primarily in management areas 3 and 4. Locations will include not only sites where cattle congregate, such as springs, but also site where cattle movement is more dispersed.	Bulk density samples collected with a surface core sampler. Photograph each sampling site.	grams/cm ³ converted to lbs/ft ³ .	Once yearly for 5 years.	Studies will help determine if increased use is evenly distributed across all sites or is concentrated at certain types of sites. Data will indicate where and to what degree trampling impacts are occurring and whether mitigation (lower stocking rates or physical protection, etc.) should be initiated.	\$ 2,000
	Movement of artifacts as a result of erosion and trampling	Selected sites, primarily in management areas 3 and 4.	Photo Plot-Measurement Method using close-up photographs and measurements to show quantitative changes in the distribution of artifacts.	Number of artifacts displaced or altered per square yard.	Annually.	Location changes of over 25 percent might indicate that the manager should consider mitigation in the form of distribution changes, lowered stocking rates, or physical protection measures.	\$ 3,000

RECREATION

General recreation use	Management Areas 1, 8, 10, and 11.	Occular reconnaissance.	Visitor counts, area inspections to look for vandalism, resource abuse, etc.	One week day and one weekend day/per week (Memorial Day through Labor Day). One day/week rest of year.	Collected data reveals user conflicts, resource degradation, or safety hazards.	\$ 9,000
General recreation use and demand	Developed recreation sites.	Visitor registration boxes.	Visitor counts, visitor request.	Boxes to be checked twice per month.	Collected data indicating increased visitor use/year and, thus, need for additional facilities.	\$ 3,000
Off-road vehicle use	Area wide.	Aerial reconnaissance and aerial photography.	Visitor counts, trail and road proliferation.	Two winter flights/year. One summer or fall flight biennially.	Collected data reveals visitor abuse of ORV designations. Steps taken to educate users and provide designation enforcement.	\$6,000/yr. + \$ 3,000 every other yr.

APPENDIX D

Erosion Rates by Allotment

ESTIMATED SHEET EROSION RATES
UNIVERSAL SOIL LOSS EQUATION²
TONS/ACRE/YEAR

Allotment No.	Name	PES ¹	A	Alternatives 8	C	D	Sub	0	Allotment No.	Name	PES ¹	A	Alternatives 8	C	D	Sub	0
1031	Golden Valley Iso. Tract		.4	1.7	.4	.4	.4	.4	5022	Grape Creek		1.6	2.9	1.8	1.6	1.1	
1032	Churchill Tract		.2	.2	.2	.2	.2	.2	5023	Cove		1.4	1.6	1.3	1.3	1.2	
4025	Simon Baker		.9	.8	.8	.8	.7		5024	Almo Creek		4.4	5.3	4.4	3.7	2.3	
4026	Bruce Bedke - Private	S,E	3.1	3.7	3.1	2.8	2.2		5025	Graham Creek		1.1	1.1	1.0	1.0	.8	
4027	Goose Creek Group	M,E	7.8	9.3	7.1	7.1	3.6		5026	Emery Creek		5.9	6.6	5.9	4.6	2.6	
4028	Bedke - Churchill		1.4	2.5	1.4	1.4	1.0		5027	Circle Creek		5.9	7.9	5.5	5.4	4.7	
4029	Karl E. Bedke Goose Creek	S	3.6	4.3	3.6	3.6	3.6		5028	Junction Creek		7.5	7.5	7.5	6.1	4.1	
4032	Dry Creek - Artesian		5.1	5.7	5.1	4.4	2.5		5029	Trail Canyon		10.8	10.8	10.7	8.6	6.5	
4033	Callahan		3.8	4.5	3.8	3.1	2.4		5030	Tracy Lane		1.1	1.1	1.1	.7	.5	
4034	Callahan - Matthews		7.3	7.3	4.2	4.1	4.0		5031	Heath Canyon		7.7	8.4	7.7	7.7	7.7	
4052	Critchfield - Individual		13.6	13.6	13.6	10.9	9.9		5032	Smoky Mountain		6.6	6.1	6.6	5.7	4.3	
4056	Goose Creek - Fairchild		3.4	3.0	3.0	2.0	1.3		5033	Moulton		9.4	10.0	8.8	6.3	4.4	
4061	Hedges		2.7	2.3	2.3	1.9	1.6		5034	State Line		.6	.8	.6	.5	.4	
4062	Harper - Goose Creek		4.9	5.5	4.9	3.8	3.8		5035	Sparks Basin		6.4	6.9	6.4	5.3	4.3	
4064	Matthews - Churchill		4.2	4.2	4.2	4.2	3.8		5036	Junction Seeding		7.9	8.7	7.2	7.1	5.0	
4065	Milner - Holyoak		.7	1.0	.7	.6	.4		5037	Almo Flat		.6	.6	.6	.5	.3	
4067	Buckhorn - Churchill		5.7	7.6	5.7	5.7	2.5		5038	Cole Lane		.6	.6	.6	.5	.4	
4068	Dry Creek		7.2	6.9	7.1	6.3	3.6		5039	Gully		1.2	1.7	1.2	1.0	.6	
4069	Artesian - Kidd		7.1	10.1	7.1	7.1	4.1		5040	Johnson Creek		.5	.8	.6	.5	.4	
4070	Worthington Springs	M	7.9	9.8	6.9	6.8	5.9		5041	E-Y Flat		1.2	1.2	1.2	1.1	.7	
4071	Artesian Kidd Iso.		8.1	8.1	8.1	8.1	8.1		5042	George Creek		1.3	1.6	1.3	1.1	.9	
4075	Marion Group		.4	.4	.4	.4	.3		5043	Narrows Seeding		4.0	4.9	4.1	3.6	2.7	
4078	Mabey Goose Creek		7.3	7.4	7.3	7.3	5.7		5044	State Spring	M	3.0	3.8	3.0	2.6	2.6	
4080	Martin Goose Creek		5.1	5.1	4.6	4.1	3.0		5045	Clear Creek	M	.8	1.0	.8	.7	.4	
4081	Cold Spring		3.2	4.9	2.8	2.8	2.0		5046	Ward E-Y		1.9	2.4	1.9	1.4	1.4	
4082	Matthews - Goose Creek		3.6	3.6	3.6	3.2	1.8		5047	South Bridge	S	.7	.7	.7	.7	.7	
4083	Willow Creek - Anderson		2.4	2.4	2.4	1.2	1.2		5048	Naf		2.5	3.1	2.7	2.3	1.7	
4084	Churchill - Matthews		3.7	4.7	3.7	3.7	2.9		5049	Marsh Creek Iso.		3.2	3.2	3.2	3.2	3.2	
4086	Goose Creek - McIntosh		5.6	4.9	4.9	4.3	3.7		5050	Glen		.4	.3	.4	.3	.3	
4087	Churchill - Mullen		.4	.5	.3	.3	.3		5051	Keogh	M	.2	.3	.2	.2	.2	
4088	Goose Creek - Mullen		3.3	2.9	2.6	2.5	2.2		5052	North Albion		4.4	4.7	4.0	4.0	3.4	
4089	Goose Creek - Ward		5.8	6.3	5.8	5.8	5.8		5053	Almo (Castle Rock)		1.1	1.3	1.2	1.1	1.1	
4090	Goose Creek		4.7	4.7	4.7	4.7	3.3		5054	Idahome Wildlife		.4	.4	.4	.4	.4	
4093	Goose Creek - Poulton		11.4	11.4	10.3	9.4	8.0		5057	Weigh Station		.6	.6	.6	.5	.5	
4094	Churchill - Poulton		1.3	1.3	1.3	1.3	.8		5301	Highway Common		.2	.3	.2	.2	.1	
4099	Beaver Dam	S,E	6.9	4.7	3.9	3.5	3.5		5303	West Toews		.4	.4	.4	.3	.2	
4100	North Emery	M	22.8	24.4	21.3	20.8	18.3		5304	East Toews		.5	.5	.5	.4	.3	
4103	Shoulder "3" Inc.	S,E	11.2	12.4	9.9	8.7	4.9		5305	Kunau		.3	.3	.3	.2	.2	
4104	Baker	E	9.4	10.4	8.3	8.3	7.3		5306	No Mans Land		.4	.4	.4	.2	.2	
4105	Oay	M	17.9	18.6	17.9	16.1	16.1		5307	Basalt Seeding		.4	.5	.4	.2	.2	
4110	Pickett - Wake		.5	.6	.5	.5	.4		5308	Raft River		.3	.4	.3	.3	.2	
4111	Warr - Pickett		.3	.3	.3	.3	.2		5309	Yale		.3	.3	.3	.2	.2	
4112	Alastra		7.3	8.2	6.3	6.3	4.5		5310	Gifford Springs		.6	2.0	.5	.5	.5	
4113	Earl Whiteley		1.7	1.7	1.5	1.5	1.3		5311	Horse Butte		1.4	1.4	1.4	1.4	1.4	
4115	Big Cedar - Churchill		3.1	3.5	2.7	2.7	2.1		5312	Raft River Iso. #1		.4	1.2	.4	.4	.4	
4116	Marchant - Goose Creek		3.9	4.0	3.6	3.6	2.8		5313	Chapin		.5	.7	.5	.5	.3	
4117	Goose Creek Private #1		6.6	7.7	7.1	6.6	5.4		5314	Dairy Springs		6.4	7.1	6.4	6.4	4.3	
4118	Birch Creek		3.7	4.3	3.7	2.7	2.1		5315	Warm Springs		10.8	10.8	10.0	10.8	7.5	
4120	Junction Valley Parcels		2.0	2.4	2.0	2.0	2.0		5320	Warm Creek		.3	.4	.3	.2	.2	
4127	Stone Cabin Iso.		4.5	4.5	4.5	3.8	3.8		5321	Antelope		7.0	8.3	6.4	6.0	4.5	
4128	Land Creek Iso.		3.1	3.1	3.1	3.1	3.1		5322	Shirley Creek		5.9	8.1	5.4	5.4	4.9	
4129	Fairchild Canyon		5.8	5.8	4.8	4.8	4.8		5323	North Lake Fork		6.5	8.3	5.9	5.9	4.1	
4130	Land Creek		3.0	3.3	2.7	3.0	2.3		5324	South Lake Fork		8.3	9.1	8.3	6.8	4.5	
4131	Mill Creek		1.5	1.5	1.5	1.5	.4		5325	Sublett		8.7	9.7	8.7	6.8	4.8	
4132	Two Knobs		.6	.6	.6	.4	.4		5326	Point Springs		.3	.4	.3	.2	.2	
4133	Churchill Tracts		.4	.5	.4	.3	.3		5327	Meadow Creek		10.0	11.2	9.0	8.9	5.6	
4134	Robinson Hole		5.6	5.6	5.6	5.6	5.6		5328	Point		.6	.8	.6	.5	.4	
4140	Birch Creek Parcels		3.3	3.8	3.3	3.3	3.3		5330	Sandrock	M	3.1	3.1	3.1	3.1	1.5	
5001	North Cotterel	M	11.2	14.3	10.2	10.2	6.1		5331	Bridge		.6	.7	.6	.6	.4	
5002	South Cotterel	M	5.2	8.1	5.2	5.2	2.3		5332	Strevel	M	1.6	1.7	.6	.6	.4	
5003	Jim Sage		5.8	8.0	5.3	4.2	1.6		5333	Green Canyon		2.1	2.8	1.9	1.4	1.4	
5004	Cassia Creek		.5	.6	.5	.4	.3		5336	Raft River Iso. #2		.2	.2	.2	.2	.2	
5005	Almo - Womack		.9	1.0	.9	.9	.6		5337	Raft River Iso. #3		.2	.3	.2	.2	.2	
5006	Chokecherry	M	.4	.4	.4	.4	.2		5338	Sublett Road Triangle		.2	.2	.2	.2	.2	
5007	Water Canyon		6.4	8.6	8.0	6.0	.5		5339	H P & P		.5	.5	.5	.5	.5	
5009	Bridger Canyon		6.4	9.7	6.4	5.4	.6		5340	Round Mountain		.8	.9	.8	.8	.8	
5010	View		1.2	1.2	1.0	1.0	.9		5341	Valley		.4	.4	.4	.4	.4	
5011	Pine Knob		5.2	5.7	5.2	3.9	3.0		5342	Railroad Grade		.4	.4	.4	.4	.4	
5012	Lunch Creek		5.1	6.1	5.1	4.7	3.7		5343	Landing Field		.2	.2	.2	.2	.2	
5013	Crystal		1.8	2.2	1.8	1.5	.7		5344	OGE		.2	.3	.2	.2	.2	
5014	Marsh Creek		2.3	2.3	2.3	2.3	1.8		5345	Strip		.2	.2	.2	.2	.2	
5015	Howell Creek		4.1	4.2	3.6	3.6	2.4		5346	Cemetery		.1	.1	.1	.1	.1	
5016	Sibley		6.3	10.7	7.7	6.5	4.1		5347	Idahome Interchange		.3	.3	.3	.3	.3	
5017	Conner Creek		6.9	13.0	8.8	6.4	4.4		5348	Burnt Canyon		9.9	10.0	9.9	9.9	9.9	
5018	South Conner		4.5	5.7	5.7	3.7	2.9										
5019	Rocky Hollow		1.0	1.4	1.4	1.4	.8										
5020	Idahome Iso.		.3	.3	.3	.2	.2										
5021	Middle Hill		3.1	4.9	3.6	3.1	1.4										
										WEIGHTED AVERAGE		4.1	5.1	3.8	3.5	2.2	

1 = PES - Present Erosion Susceptibility

These are potentially high eroding soil types as identified in the Cassia RMP.

M - indicates those allotments types that could have moderate to severe problems, because greater than 10 percent and less than 50 percent of the land area contains potentially high eroding soil.

S - indicates those allotments that could have severe erosion problems, because greater than 50 percent of the land area contains potentially high eroding soil.

E - Indicates those allotments that currently have some severe accelerated gully erosion problems.

2 = The USLE is an erosion model designed to compute longtime average soil losses from sheet and rill erosion under specified conditions. It does not compute sediment yields from gully, streambank, and streambed erosion.

Vegetation Types by Allotment

Management Area 1 No. Name	Annual Forbs	Native Perennial Grass	Seedlings	Riparian	Grease- wood	Shadscale/ Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit- brush	Mixed Mt. Brush	Snake- weed	Douglas/ Alpine Fir	Total	
													Pinyon	Juniper
4065 Milner		478											932	
Management Area 2 No. Name	Annual Forbs	Native Perennial Grass	Seedlings	Riparian	Grease- wood	Shadscale/ Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit- brush	Mixed Mt. Brush	Snake- weed	Douglas/ Alpine Fir	Total	
													Pinyon	Juniper
4025 Simon Baker			224				941	1,887					224	
4032 Dry Creek-Artesian			436				1,176	513					3,264	
4067 Buckhorn-Churchill		1,124	1,814	16			2,120	3,146					7,876	
4068 Dry Creek			1,003	14			825	3,363			878		7,161	
4069 Artesian Kidd		144	537					243					4,863	
4071 Artesian Kidd-Iso.													243	
4075 Marion Group		509	1,307		79		2,113	414					4,422	
4081 Cold Spring		132	441				3,581	2,483		639	200		9,311	
4087 Churchill-Mullen			236	14			173	246					1,280	
4034 Churchill-Poulton		89	1,690				51	1,881			479		4,305	
4110 Pickett-Wade		3,033	1,000		206		782	280					5,301	
Total		5,031	3,688	44	235		11,762	14,356		639	1,557		5,794	
													43,256	
Management Area 3 No. Name	Annual Forbs	Native Perennial Grass	Seedlings	Riparian	Grease- wood	Shadscale/ Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit- brush	Mixed Mt. Brush	Snake- weed	Douglas/ Alpine Fir	Total	
													Pinyon	Juniper
4026 Bruce Bedke-Private				7			1,601						831	15
4029 Karl E. Bedke-Goose Creek							134						135	
4078 Mabey Goose Creek							468	903					466	
4088 Goose Creek-Mullen			179				25	163					1,842	
4093 Goose Creek-Poulton		1,046		3			1,181	27					191	
4099 Beaver Dam			156				1,270						3,831	
4100 North Emery		42					22						920	
4103 Shoulder "3" Inc.		520	752	6			448	362					160	
4104 Baker		56					402						2,362	
4105 Day							42						2,181	
4111 Warr-Pickett		1,664	1,199	4			219	3,785					306	
Total		1,664	2,286	20			5,362	5,245					11,927	102
													27,106	

Management Area 4	Annual Forbs	Native Perennial Grass	Seedlings	Riparian	Grease-wood	Shadscale/Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit-brush	Mixed Mt. Brush	Snake-weed	Aspen	Douglas/Alpine Fir	Pinyon	Juniper	Barren	Total Federal
No. Name																	
4027 Goose Creek Group		5	4,164	40			9,222	816	87	2,054		160			12,182		28,730
4052 Critchfield-Ind.	6	12						193									211
4062 Harper-Goose Creek							456	178							160		338
4070 Worthington Springs		60					107	31		145		33			480		1,027
4089 Goose Creek-Ward							234	126									411
4090 Goose Creek							834	32									266
4112 Alastra		314					233	830				5					1,983
4113 Earl Whiteley							92	1,249									1,482
4116 Marchant-Goose Creek	223		719				1,433	419		71							1,034
4117 Goose Creek Private #1			477	1			64	85									2,401
4120 Junction Valley Parcels			47				532	53		34		203			694		1,507
4127 Stone Cabin Iso.		59					172	46	42			32					250
4134 Robinson Hole	2						13,379	4,058	129	2,304		433			13,516		39,948
4140 Birch Creek Parcels	229	452	5,407	41													
Total																	

Management Area 5	Annual Forbs	Native Perennial Grass	Seedlings	Riparian	Grease-wood	Shadscale/Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit-brush	Mixed Mt. Brush	Snake-weed	Aspen	Douglas/Alpine Fir	Pinyon	Juniper	Barren	Total Federal
No. Name																	

- - Administrative Site

Management Area 6	Annual Forbs	Native Perennial Grass	Seedlings	Riparian	Grease-wood	Shadscale/Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit-brush	Mixed Mt. Brush	Snake-weed	Aspen	Douglas/Alpine Fir	Pinyon	Juniper	Barren	Total Federal
No. Name																	
5007 Water Canyon		934					406	202							99	43	1,684
5009 Bridger Canyon		144	36				152								329	952	1,461
5010 View		151	23												10	30	326
5049 Marsh Creek Iso.							78	37							45	40	160
5052 North Albion							636	239							483	1,025	3,671
Total		1,229	59														

Management Area 7	Annual Forbs	Native Perennial Grass	Seedings	Riparian	Grease-wood	Shadscale/Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit-brush	Mixed Mt. Brush	Snake-weed	Aspen	Douglas/Alpine Fir	Pinyon	Juniper	Barren	Total Federal
4028 Bedke-Churchill		96	357				207	1,141									1,801
4033 Calahan							622	187									809
4034 Callahan-Matthews	103		58				559	67									67
4056 Goose Creek-Fairchild							72	88									720
4061 Hedges							120										160
4064 Matthews-Churchill							206	124			37						120
4080 Martin Goose Creek							284	196									367
4082 Matthews-Goose Creek				2			441	100							338		820
4083 Willow Creek-Anderson		29		1			853	189									571
4084 Churchill-Matthews		68	283				80		83								1,476
4086 Goose Creek-McIntosh							213	22							129		80
4115 Big Cedar-Churchill		32					397	242									364
4118 Birch Creek	24						20			20							695
4128 Land Creek Iso.							40										40
4129 Fairchild Canyon							285	180									466
4130 Land Creek				1			240										240
4131 Mill Creek							52										80
4132 Two Knobs			28				8	151									399
5011 Pine Knob		84	51				1,087	245									2,009
5012 Lunch Creek		315					55	53							118		1,111
5013 Crystal		234	738				574	138		31			83				221
5014 Marsh Creek				3			72	652									840
5015 Howell Creek							1,017	1,245									724
5016 Sibley							53	427									2,262
5017 Conner Creek							280										480
5018 South Conner							690			643							280
5019 Rocky Hollow				2			596	1,312									2,647
5021 Middle Hill																	916
5022 Grape Creek															320		400
5023 Cove			113												287		400
Total	127	858	1,628	9			9,123	7,022	83	694	37		83	349	1,192		21,205

Management Area 8	Annual Forbs	Native Perennial Grass	Seedings	Riparian	Grease-wood	Shadscale/Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit-brush	Mixed Mt. Brush	Snake-weed	Aspen	Douglas/Alpine Fir	Pinyon	Juniper	Barren	Total Federal
5024 Almo Creek				1			204	34		24				261			320
5025 Graham Creek		181		1			171	44		91			191	177			845
5026 Emery Creek		222					21			242							679
5027 Circle Creek				1			184							1,046			1,068
5028 Junction Creek							918	87		376					196		184
5029 Trail Canyon		63					557								323		1,640
5030 Tracy Lane							55							1,409			880
5031 Heath Canyon														1,335			1,464
5032 Smoky Mountain							90								293		383
5033 Moulton							233								17		305
5034 State Line							787		55						754		1,919
5035 Sparks Basin		696	2,367	2		64	758							1,313	1,040		6,520
5036 Junction Seeding							80										80
5053 Almo		1,162	2,367	5		64	4,058	165	55	733			191	5,919	2,623		17,622

Management Area 9	Annual Forbs	Native Perennial Grass	Seedings	Riparian	Grease- wood	Shadscale/ Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit- brush	Mixed Mt. Brush	Snake- weed	Aspen	Douglas/ Alpine Fir	Pinyon	Juniper	Barren	Total Federal
5020 Idaho Iso.		463			72		245						780				780
5037 Almo Flat		1,031			59		84						1,174				1,174
5038 Cole Lane			490		134								624				624
5039 Gully					1,609	637	2,269						4,515				4,515
5040 Johnson Creek				5	212	625	1,142						2,080				2,080
5041 E-Y Flat			1,245		999		2,574						4,818				4,818
5042 George Creek					483		1,311						2,747				2,747
5043 Narrows Seeding			1,604		206		485						3,807				3,807
5044 State Spring					193	2,126	7,921						1,008	309	215		1,008
5045 Clear Creek			239				721						10,240				10,240
5046 Ward E-Y					1,056								960				960
5047 South Bridge													1,056				1,056
5048 Naf													734	190			734
5050 Glen					160		100						160				160
5320 Warm Creek					150								24,039			80	24,039
5326 Point Springs	3,771	1,876	9,656	12	2,308	196	6,101		39				8,227				8,227
5328 Point	1,241	780	6,654				332						12,786			158	12,786
5330 Sandrock	1,670		2,248		1,359	4,306	2,242						3,144		23		3,144
5331 Bridge	823		1,422				389						11,855		110		11,855
5332 Strevell	1,868	113	2,955		4,463	1,386	969						6,049		225		6,049
5333 Green Canyon	265	229	272		1,542	2,694	217						442				442
5336 Ratt River Iso. #2	199				70		177						518			72	518
5338 Sublett Road Triangle					103	500							603				603
5339 H P & P		96	165		22								296				296
5340 Round Mountain	20					11	265						320				320
5341 Valley							320						492				492
5342 Railroad Grade					411	81							960				960
5343 Landing Field						856	104						560				560
5344 DOE					190		370						290				290
5345 Strip						280							160				160
5346 Cemetery						160							90				90
5347 Idaho Interchange					90								105,808				105,808
Total	9,857	4,538	27,350	17	14,747	14,857	29,348	3,000	39				764	309	764	432	105,808

Management Area 10	Annual Forbs	Native Perennial Grass	Seedings	Riparian	Grease- wood	Shadscale/ Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit- brush	Mixed Mt. Brush	Snake- weed	Aspen	Douglas/ Alpine Fir	Pinyon	Juniper	Barren	Total Federal
5003 Jim Sage		8,501	1,536	25	30		14,575	28,235	1,719	788			25		10,983		66,417
5004 Cassia Creek			2,395		164		1,056	287					3,902				3,902
5005 Almo-Womack			3,032		226		937						4,195				4,195
5006 Chokecherry			417					311					737		9		737
5051 Keogh		3,501	7,380	25	402		644	28,833	1,719	788			1,046		10,992		1,046
Total		3,501	7,380	25	822		17,212	28,833	1,719	788			76,297		10,992		76,297

Management Area 11	Annual Forbs	Native Perennial Grass	Seedings	Riparian	Grease- wood	Shadscale/ Saltbrush	Big Sagebrush	Low/Black Sagebrush	Rabbit- brush	Mixed Mt. Brush	Snake- weed	Aspen	Douglas/ Alpine Fir	Pinyon	Juniper	Barren	Total Federal
5001 North Cottrel			651	4			1,768	7,517		2					4		9,946
5002 South Cottrel		218	8,370	22			2,844	13,194							4,869		29,517
5057 Weigh Station		213	9,021	25			1,044	20,711							4,873		1,044
Total		213	9,021	25			5,656	20,711							4,873		40,507

Appendix E (cont.)

Management Area 12		Native		Annual		Seedings		Riparian		Grease- Shadscale/		Big		Low/Black		Rabbit-		Mixed		Snake-		Douglas/		Total	
No. Name		Perennial	Grass	Forbs						wood	Saltbrush	Sagebrush		Sagebrush		brush		Mt. Brush		weed		Alpine		Barren	Federal
5301 Highway Common		5,868	13,057									3,731												22,656	
5303 West Toews		36	715									25												1,777	
5304 East Toews		607	184									283												1,074	
5305 Kunau			5,252									283				392								5,927	
5306 No Mans Land			1,157									1,863												3,020	
5307 Basalt Seating			2,119									886												3,005	
5308 Raft River		1,278	3,722							135		543												5,683	
5309 Yale		7,789	3,527							135		7,619				392								3,527	
Total			29,734																					45,669	

Management Area 13		Native		Annual		Seedings		Riparian		Grease- Shadscale/		Big		Low/Black		Rabbit-		Mixed		Snake-		Douglas/		Total	
No. Name		Perennial	Grass	Forbs						wood	Saltbrush	Sagebrush		Sagebrush		brush		Mt. Brush		weed		Alpine		Barren	Federal
5313 Chapin		853										1,327		95										163	2,575
5314 Dairy Springs		846										7,352										1		69	9,943
5315 Warm Springs			156									513		443										184	2,220
5321 Antelope		306										1,965												3,699	
5322 Shirley Creek		323										135												680	
5323 North Lake Fork		281										532												1,233	
5324 South Lake Fork		350										660												1,079	
5325 Sublett												277												743	
5327 Meadow Creek		1,116										3,065		2,438								1		83	13,372
5328 Point		12										3,402												240	9,755
5348 Burnt Canyon		1,243										180												504	40,594
Total												24,429		2,976											

Management Area 14		Native		Annual		Seedings		Riparian		Grease- Shadscale/		Big		Low/Black		Rabbit-		Mixed		Snake-		Douglas/		Total	
No. Name		Perennial	Grass	Forbs						wood	Saltbrush	Sagebrush		Sagebrush		brush		Mt. Brush		weed		Alpine		Barren	Federal
4025 Simon Baker																								40	
4094 Churchill-Poulton		30								10		40												40	
4133 Churchill Tracts						120																		120	
5054 Idaho Wildlife										71		169												240	
5310 Gifford Springs		42								38														80	
5311 Horse Butte						16				101														163	280
5312 Raft River Iso. #1												240												240	
5337 Raft River Iso. #3		54								24		304												358	
1031 Golden Valley Iso. Tract										200		56												80	
1032 Churchill Tract		126								444		809												163	1,678
Total																									

APPENDIX F

Plants Commonly Found in the Major Vegetation Types

Major Vegetation Type	Grasses	Forbs	Shrubs & Trees
Annual Forbs	Cheatgrass Sandberg Bluegrass Bottlebrush Squirrel-tail Western Wheatgrass Bulbous Bluegrass	Halogeton Aster Hegdemustard Yarrow Onion Phlox Russian Thistle	Plains Pricklypear Wyoming Big Sagebrush Green Rabbitbrush Shadescale Saltbush Low/Black Sagebrush
Native Perennial Grass	Western Wheatgrass Bluebunch Wheatgrass Basin Wildrye Indian Ricegrass Squirreltail Needle and Thread Bulbous Bluegrass	Yarrow Pepperweed Onion	Basin Big Sagebrush Wyoming Big Sagebrush
Seedings	Crested Wheatgrass Sandberg Bluegrass Cheatgrass	Medic Lupine	Wyoming Big Sagebrush Broom Snakeweed Rubber Rabbitbush
Riparian	Basin Wildrye Sedge Rush Junegrass Bulbous Bluegrass Western Wheatgrass Sandberg Bluegrass Kentucky Bluegrass	Western Yarrow Horsemint Wild Onion Geranium Iris Plantain Thistle Mariposa Lily Biscuitroot Deathcamas	Quaking Aspen Ribes Woods Rose Willow
Greasewood	Cheatgrass Crested Wheatgrass Alkali Sacaton Bottlebrush Squirrel-tail	Pepperweed Halogeton Russian Thistle	Greasewood Nuttall Saltbush Rubber Rabbitbrush

Shadscale/ Saltbrush	Cheatgrass Alkali Sacaton Bottlebrush Squirrel- tail	Globe Mallow Russian Thistle Pepperweed Halogeton	Shadscale Nuttall Saltbush Rubber Rabbitbrush
Big Sagebrush	Sandberg Bluegrass Bottlebrush Squirrel- tail Cheatgrass Japanese Brome Kentucky Bluegrass Indian Ricegrass Basin Wildrye Bluebunch Wheatgrass Mountain Brome Idaho Fescue Prairie Junegrass Nevada Bluegrass	Lupine Dusky Maiden Arrowleaf Balsamroot Indian Paintbrush Aster Gilia Pepperweed Western Yarrow Wild Onion Mule's Ear Wyethia Gray Sagewort Daisy Deathcamas Fleabane Cryptantha Toadflax Buckwheat Mariposa Lily Locoweed Phlox	Mountain Big Sagebrush Basin Big Sagebrush Wyoming Big Sagebrush Nuttall Saltbush Plains Pricklypear Antelope Bitterbrush Broom Snakeweed
Low/Black Sagebrush	Sandberg Bluegrass Bottlebrush Squirrel- tail Cheatgrass	Halogeton Pussytoes Buckwheat Aster Mariposa Lily Locoweed Indian Paintbrush Lupine Phlox	Green Rabbitbrush Low Sagebrush Black Sagebrush Plains Pricklypear Broom Snakeweed
Rabbitbrush	Cheatgrass Sandberg Bluegrass	Halogeton Phlox Pepperweed Russian Thistle	Rubber Rabbitbrush Wyoming Big Sagebrush Black Sagebrush Low Sagebrush Plains Pricklypear

Mixed Mountain Shrub	Bluebunch Wheatgrass Kentucky Bluegrass Basin Wildrye Nevada Bluegrass Prairie Junegrass	Western Yarrow Mule's Ear Wyethia Helianthella Lupine Horsemint Arrowleaf Balsamroot	Mountain Mahogany Oregon Grape Snowberry Serviceberry Ceanothus Buckwheat
Snakeweed	Cheatgrass Sandberg Bluegrass	Halogeton Phlox Pepperweed Russian Thistle	Broom Snakeweed Wyoming Big Sagebrush Black Sagebrush Low Sagebrush Plains Pricklypear
Aspen	Mountain Brome Basin Wildrye Nevada Bluegrass Thickspike Wheatgrass Idaho Fescue	Geranium Western Yarrow Horsemint Helianthella	Quaking Aspen Chokecherry Gooseberry Snowberry
Douglas/Sub- alpine Fir	Bluebunch Wheatgrass Needlegrass Kentucky Bluegrass	Pussytoes Toadflax	Douglas Fir Oregon Grape Snowberry Basin Big Sagebrush Subalpine Fir
Pinyon	Sandberg Bluegrass Indian Ricegrass Cheatgrass Bottlebrush Squirrel- tail	Penstemon Phlox Western Yarrow Buckwheat	Singleleaf Pinyon Oregon Grape Plains Pricklypear Wyoming Big Sagebrush Low Sagebrush Black Sagebrush
Juniper	Sandberg Bluegrass Indian Ricegrass Cheatgrass Bottlebrush Squirrel- tail	Penstemon Phlox Western Yarrow Buckwheat	Utah Juniper Oregon Grape Plains Pricklypear Wyoming Big Sagebrush Black Sagebrush Low Sagebrush
Barren	Cheatgrass	Mustard	

APPENDIX G

METHODOLOGY FOR DETERMINING & PROJECTING RANGE TREND

When the vegetative inventory was conducted an apparent trend form (copy attached) was completed at each of the inventoried sites (965). The apparent trend data was analyzed along with any long-term trend data available on an allotment basis. If no long-term data was available then the apparent trend recordation at the vegetative inventory time stands as the trend data for Alternative A. Trend projections for Alternatives B, C and D were made on an individual allotment basis by inventoried site. Value was placed where applicable on the following:

- a. Absence or existence of a grazing system
- b. Current apparent or long-term trend
- c. Existing condition
- d. Proposed increase or decrease in grazing pressure
- e. Season of use
- f. Delay or advance the livestock turnout date
- g. Historic trespass problems
- h. Annual precipitation

Examples: A site that has a proposed decrease in grazing pressure, grazing system, delay in livestock turn out date and is in something less than excellent condition and trespass is eliminated is projected to show an upward trend.

If the current trend is down or static and livestock grazing is eliminated the trend is expected to go up. If the grazing pressure is reduced or otherwise positively adjusted by a management action the trend is expected to stabilize.

Those areas that are currently in excellent condition are expected to stabilize unless the current trend is down and no grazing system or other change in use is proposed.

Management Area 1 No.	Name	Invento- ried Fed. Acres	A			B			C			0			Sub 0		
			Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	UP Acres	STATIC Acres	DOWN Acres
4065	Milner-Holyoak	932	0	680	252	634	0	298	200	211	521	0	220	712	932	0	0

Management Area 2 No.	Name	Invento- ried Fed. Acres	A			B			C			0			Sub 0		
			Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	UP Acres	STATIC Acres	DOWN Acres
4025	Simon Baker	224	146	13	65	224	0	0	224	0	0	224	0	0	224	0	0
4032	Dry Creek-Artesian	3,264	326	2,775	163	3,059	205	0	3,059	205	0	3,059	205	0	3,264	0	0
4067	Buckhorn-Churchill	7,876	394	5,434	2,048	6,415	1,461	0	6,415	1,461	0	6,415	1,461	0	7,744	132	0
4068	Ory Creek	7,161	0	4,297	2,864	5,913	1,248	0	5,807	1,354	0	5,307	1,854	14	7,147	0	0
4069	Artesian-Kidd	4,869	390	4,139	340	4,566	303	0	4,566	303	0	4,483	386	0	4,869	0	0
4071	Artesian Kidd Iso.	243	0	70	173	0	70	173	0	70	173	0	70	173	0	70	173
4075	Marion Group	4,422	1,327	663	2,432	1,949	2,473	0	1,949	2,473	0	1,949	2,473	0	3,214	1,208	0
4081	Cold Spring	9,311	186	7,821	1,304	8,681	630	0	8,681	630	0	7,921	1,390	0	9,311	0	0
4087	Churchill-Mullen	1,280	0	1,101	179	1,280	0	0	1,107	173	0	1,107	173	0	1,280	0	0
4094	Churchill-Poulton	4,305	0	2,282	2,023	2,689	1,616	0	2,689	1,616	0	2,389	1,916	0	4,305	0	0
4110	Pickett-Wake	5,301	901	265	4,135	4,152	1,149	0	4,152	1,149	0	4,152	1,149	0	4,391	910	0
Total			3,670	28,860	15,726	38,928	9,155	173	38,822	9,261	173	37,006	11,077	173	45,749	2,334	173

Management Area 3 No.	Name	Invento- ried Fed. Acres	A			B			C			D			Sub D		
			Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	UP Acres	STATIC Acres	DOWN Acres
4026	Bruce Bedke-Private	2,454	123	1,669	662	2,395	59	0	2,395	59	0	1,780	674	0	2,454	0	0
4029	Karl E. Bedke-Goose Creek	319	80	239	0	210	109	0	20	294	0	20	299	0	80	239	0
4073	Mabey Goose Creek	1,842	461	1,197	184	1,732	110	0	1,732	110	0	1,732	110	0	1,617	225	0
4088	Goose Creek-Mullen	553	0	335	223	395	163	0	392	166	0	342	216	0	558	0	0
4093	Goose Creek-Poulton	6,088	2,557	2,557	974	5,171	917	0	5,171	917	0	5,171	917	0	6,088	0	0
4099	Beaver Dam	2,346	516	798	1,032	1,255	1,091	0	1,255	1,091	0	1,255	1,091	0	2,346	0	0
4100	North Emery	224	92	132	0	224	0	0	224	0	0	167	57	0	224	0	0
4103	Shoulder "3" Inc.	4,537	2,405	1,679	453	4,084	453	0	4,084	453	0	4,084	453	0	4,537	0	0
4104	Baker	2,639	1,531	686	422	2,270	369	0	2,270	369	0	2,190	449	0	2,639	0	0
4105	Oay	348	77	188	83	265	83	0	265	83	0	265	83	0	348	0	0
4111	Warr-Pickett	5,751	1,093	863	3,795	2,502	3,249	0	2,502	3,249	0	1,966	3,785	0	4,602	1,149	0
Total			8,935	10,343	7,828	20,503	6,603	0	20,310	6,796	0	18,972	3,134	0	25,493	1,613	0

Appendix G (cont.)

Management Area 4		Inventory- ried Fed. Acres	A			B			C			D			Sub D		
No.	Name		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres
4027	Goose Creek Group	28,730	4,884	19,536	4,310	13,298	12,742	2,690	11,938	14,102	2,690	5,748	18,706	4,236	28,630	100	0
4052	Critchfield-Ind.	211	0	154	57	10	114	87	0	124	87	0	124	87	199	12	0
4062	Harper-Goose Creek	338	0	247	91	112	226	24	80	234	24	0	234	104	338	0	0
4070	Worthington Springs	1,027	421	144	462	1,027	0	0	870	157	0	550	477	0	1,027	0	0
4089	Goose Creek-Ward	411	33	378	0	113	298	0	33	378	0	234	378	0	411	0	0
4090	Goose Creek	266	234	32	0	234	32	0	234	32	0	234	32	0	266	0	0
4112	Alastra	1,983	20	1,686	277	1,710	273	0	1,710	273	0	1,710	273	0	1,983	0	0
4113	Earl Whiteley	1,482	0	1,334	148	1,324	158	0	1,324	158	0	1,324	158	0	1,482	0	0
4116	Marchant-Goose Creek	1,034	589	300	145	1,034	0	0	931	103	0	811	223	0	1,432	602	0
4117	Goose Creek Private #1	2,401	648	1,753	0	747	1,654	0	747	1,654	0	747	1,654	0	2,401	0	0
4120	Junction Valley Parcels	149	0	124	25	60	89	25	24	82	25	24	82	25	0	124	25
4127	Stone Cabin Iso.	159	24	83	52	47	59	53	39	61	53	39	61	53	135	24	0
4134	Robinson Hole	1,507	316	905	286	339	611	557	339	611	557	339	611	557	1,507	0	0
4140	Birch Creek Parcels	250	170	80	0	170	80	0	170	80	0	170	80	0	170	80	0
Total		39,948	7,339	26,756	5,853	20,225	16,336	3,387	13,400	18,112	3,436	11,730	23,156	5,062	38,981	942	25

Management Area 5		Inventory- ried Fed. Acres	A			B			C			D			Sub D		
No.	Name		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres
- -	Administrative Site	19	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Management Area 6		Inventory- ried Fed. Acres	A			B			C			D			Sub D		
No.	Name		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres
5007	Water Canyon	1,684	0	1,061	623	280	1,084	320	280	1,084	320	0	1,084	630	1,684	0	0
5009	Bridger Canyon	1,461	0	1,286	175	1,307	154	0	1,307	154	0	1,227	234	0	1,461	0	0
5010	View	326	0	163	163	16	133	177	0	133	193	0	133	193	326	0	0
5049	Marsn Creek Iso.	40	0	30	10	0	30	10	0	30	10	0	30	10	0	30	10
5052	North Albion	160	0	115	45	65	95	0	65	95	0	0	115	45	0	115	45
Total		3,671	0	2,655	1,016	1,663	1,496	507	1,652	1,496	523	1,227	1,596	848	3,471	145	55

Management Area 7	No.	Name	Inventoried Fed. Acres	A			B			C			D			Sub D		
				Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres
4028		Bedke-Churchill	1,801	0	1,693	108	875	926	0	485	1,316	0	35	1,703	63	1,449	352	0
4033		Callahan	809	0	105	704	809	0	0	625	184	0	225	584	0	809	0	0
4034		Callahan-Matthews	67	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0
4056		Goose Creek-Fairchild	720	36	367	317	640	79	1	400	319	1	58	384	278	662	58	0
4061		Hedges	160	0	160	0	0	160	0	0	160	0	0	160	0	160	0	0
4064		Matthews-Churchill	120	0	120	0	120	0	0	120	0	0	120	0	0	120	0	0
4080		Martin Goose Creek	367	261	106	0	187	180	0	67	300	0	67	300	0	367	0	0
4082		Matthews-Goose Creek	320	369	312	139	337	483	0	297	523	0	175	541	104	820	0	0
4083		Willow Creek-Anderson	571	217	251	103	0	571	0	0	571	0	0	571	0	571	0	0
4084		Churchill-Matthews	1,476	162	473	841	952	514	0	500	671	305	0	671	805	1,476	0	0
4086		Goose Creek-McIntosh	80	46	34	0	63	12	0	63	12	0	63	12	0	80	0	0
4115		Big Cedar-Churchill	364	0	364	0	260	104	0	160	204	0	0	364	0	364	0	0
4118		Birch Creek	695	216	389	90	325	370	0	325	370	0	235	393	67	695	0	0
4128		Land Creek Iso.	40	0	20	20	0	20	0	20	0	20	0	20	20	0	20	20
4129		Fairchild Canyon	40	0	40	0	40	0	0	40	0	0	0	40	0	40	0	0
4130		Land Creek	466	336	130	0	336	130	0	336	130	0	336	130	0	466	0	0
4131		Mill Creek	240	24	209	7	0	240	0	0	240	0	0	240	0	240	0	0
4132		Two Knobs	80	0	80	0	2	78	0	0	80	0	0	80	0	52	28	0
5011		Pine Knob	399	0	323	76	67	227	105	0	294	105	0	294	105	399	0	0
5012		Lunch Creek	2,009	0	1,929	80	1,984	25	0	1,984	25	0	1,984	25	0	2,009	0	0
5013		Crystal	1,111	0	1,111	0	0	1,111	0	0	1,111	0	0	1,111	0	1,111	0	0
5014		Marsh Creek	221	0	221	0	0	221	0	0	221	0	0	221	0	221	0	0
5015		Howell Creek	840	0	260	580	840	0	0	500	263	77	0	263	577	837	3	0
5016		Sibley	724	0	652	72	724	0	0	300	424	0	0	652	72	724	0	0
5017		Conner Creek	2,262	0	1,244	1,018	2,262	0	0	2,245	17	0	1,245	1,017	0	2,262	0	0
5018		South Conner	480	0	480	0	480	0	0	480	0	0	480	0	0	480	0	0
5019		Rocky Hollow	280	280	0	0	280	0	0	280	0	0	280	0	0	280	0	0
5021		Middle Hill	2,647	0	2,647	0	2,647	0	0	2,647	0	0	2,647	0	0	2,647	0	0
5022		Grape Creek	916	0	916	0	916	0	0	916	0	0	916	0	0	916	0	0
5023		Cove	400	0	400	0	160	240	0	80	320	0	0	400	0	400	0	0
Total			21,205	1,947	14,703	4,555	15,321	5,753	126	12,855	7,842	508	8,871	10,243	2,091	20,657	528	20

Management Area 8			Inventoried Fed. Acres	A			B			C			D			Sub D		
No.	Name	Acres		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres
5024	Almo Creek	320	0	320	0	0	320	0	0	320	0	0	320	0	0	320	0	0
5025	Graham Creek	845	0	668	177	679	166	0	679	166	0	641	204	0	845	0	0	0
5026	Emery Creek	679	299	380	0	456	223	0	376	303	0	276	403	0	679	0	0	0
5027	Circle Creek	1,068	0	769	299	552	495	21	200	847	21	0	1,047	21	1,068	0	0	0
5028	Junction Creek	184	0	184	0	0	184	0	0	184	0	0	184	0	184	0	0	0
5029	Trail Canyon	1,640	213	1,427	0	156	1,484	0	156	1,484	0	156	1,484	0	1,640	0	0	0
5030	Tracy Lane	880	0	502	378	0	503	377	0	503	377	0	503	377	880	0	0	0
5031	Heath Canyon	1,464	0	249	1,215	55	237	1,172	0	237	1,227	0	237	1,227	0	249	0	1,215
5032	Smoky Mountain	1,335	0	547	788	0	546	789	0	546	789	0	546	789	1,335	0	0	0
5033	Moulton	383	0	249	134	61	314	8	61	314	8	0	375	8	383	0	0	0
5034	State Line	305	0	73	232	305	0	0	175	130	0	0	250	55	305	0	0	0
5035	Sparks Basin	1,919	0	1,458	461	400	1,303	216	400	1,303	216	0	1,652	267	1,919	0	0	0
5036	Junction Sealing	6,520	522	4,760	1,238	1,034	4,180	1,306	829	4,385	1,306	529	4,635	1,306	4,945	1,575	0	0
5053	Almo	80	0	80	0	0	80	0	0	80	0	0	80	0	0	80	0	0
Total		17,622	1,034	11,666	4,922	3,698	10,035	3,889	2,876	10,802	3,944	1,602	11,970	4,050	14,503	1,904	0	1,215

Appendix G (cont.)

Management Area 9 No. Name	Invento- ried Fed. Acres	A			B			C			D			Sub D	
		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	UP Acres	STATIC Acres
5020 Idahome Iso.	780	0	320	460	780	0	0	780	0	0	0	317	463	780	0
5037 Almo Flat	1,174	0	1,092	82	1,090	84	0	1,090	84	0	1,090	84	0	1,174	0
5038 Cole Lane	624	0	512	112	20	490	114	0	490	134	0	490	134	624	0
5039 Gully	4,515	0	0	4,515	2,269	2,246	0	1,200	3,315	0	1,151	3,364	0	4,515	0
5040 Johnson Creek	2,080	0	42	2,038	1,087	5	988	900	5	1,175	0	5	2,075	2,080	0
5041 E-Y Flat	4,818	0	1,108	3,710	3,819	999	0	3,819	999	0	1,245	3,573	0	4,818	0
5042 George Creek	2,747	0	961	1,786	2,747	0	0	2,747	0	0	948	1,799	0	2,747	0
5043 Narrows Seeding	3,807	0	3,617	190	618	3,189	0	550	3,257	0	0	3,307	0	3,807	0
5044 State Spring	1,008	0	685	323	216	483	309	216	483	309	7,561	699	309	1,008	0
5045 Clear Creek	10,240	0	8,090	2,150	10,240	0	0	10,240	0	0	0	2,679	0	10,240	0
5046 Ward E-Y	960	0	509	451	721	0	239	320	401	239	0	719	241	960	0
5047 South Bridge	1,056	0	0	1,056	1,056	0	0	1,056	0	0	0	0	1,056	0	1,056
5048 Naf	734	0	734	0	0	734	0	0	734	0	0	734	0	734	0
5050 Glen	160	0	0	160	0	0	160	0	0	160	0	0	160	0	0
5050 Warm Creek	24,039	5,048	4,568	14,423	19,913	4,126	0	17,912	6,127	0	9,912	14,127	0	13,746	5,293
5326 Point Springs	8,227	0	7,240	987	1,573	6,654	0	1,073	6,654	500	0	6,654	1,573	1,573	6,654
5328 Point	12,786	4,900	6,166	1,720	3,268	5,548	3,970	3,559	5,257	3,970	2,248	5,548	4,990	7,366	5,420
5330 Sandrock	3,144	1,761	283	1,100	2,410	734	0	2,410	734	0	0	1,044	0	2,224	920
5331 Bridge	11,856	2,964	6,758	2,134	11,084	772	0	11,084	772	0	9,815	2,041	0	10,566	1,290
5332 Strevell	6,049	60	3,630	2,359	4,194	1,855	0	4,194	1,855	0	4,194	1,855	0	6,049	0
5333 Green Canyon	442	0	119	323	442	0	0	412	30	0	322	120	0	442	0
5336 Raft River Iso. #2	518	0	140	378	518	0	500	300	142	76	0	142	376	0	140
5338 Sublett Road Triangle	603	0	603	0	103	0	0	50	0	553	0	0	603	0	603
5339 H P & P	283	0	212	71	118	165	0	50	165	68	0	165	118	0	212
5340 Round Mountain	296	0	275	21	296	0	100	100	196	0	0	276	20	0	275
5341 Valley	320	0	320	0	320	0	0	320	0	0	0	320	0	0	320
5342 Railroad Grade	492	0	197	295	0	185	307	0	185	307	0	185	307	197	295
5343 Landing Field	960	0	192	768	247	191	522	160	191	609	0	191	769	0	192
5344 DOE	560	0	0	560	393	0	167	200	0	360	0	0	560	0	560
5345 Strip	280	0	0	280	280	0	0	280	0	0	0	280	0	0	280
5346 Cemetery	160	0	160	0	160	0	0	160	0	0	0	160	0	0	160
5347 Idahome Interchange	90	0	90	0	0	90	0	0	90	0	0	90	0	0	90
Total	105,808	14,733	48,623	42,452	69,982	28,550	7,276	65,182	32,166	8,460	40,586	51,188	11,034	80,810	21,864

Management Area 10 No. Name	Invento- ried Fed. Acres	A			B			C			D			Sub D	
		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	UP Acres	STATIC Acres
5003 Jim Sage	66,417	5,313	37,858	23,246	66,417	0	0	60,039	6,378	0	41,739	24,678	0	65,586	831
5004 Cassia Creek	3,902	0	2,692	1,210	3,232	670	0	3,132	770	0	2,682	1,220	0	2,285	1,617
5005 Almo-Womack	4,195	0	3,943	252	3,969	226	0	3,969	226	0	3,969	226	0	4,195	0
5006 Chokecherry	737	0	715	22	737	0	0	737	0	0	728	0	0	737	0
5051 Keogn	1,046	0	649	397	644	402	0	525	521	0	0	1,046	0	0	397
Total	76,297	5,313	45,357	25,127	74,999	1,298	0	63,402	7,395	0	49,118	27,179	0	72,803	3,097

Management Area 11 No. Name	Invento- ried Fed. Acres	A			B			C			D			Sub D	
		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	UP Acres	STATIC Acres
5001 North Cottrel	9,946	0	8,056	1,890	9,946	0	0	9,946	0	0	8,313	1,613	0	9,946	0
5002 South Cottrel	29,517	3,247	26,270	0	5,203	24,314	0	5,103	24,414	0	3,203	26,184	130	27,418	2,099
5057 Weigh Station	1,044	1,044	0	0	1,044	0	0	1,044	0	0	1,044	0	0	1,044	0
Total	40,507	4,291	34,326	1,890	16,193	24,314	0	16,093	24,414	0	12,580	27,797	130	38,408	2,099

Management Area 12		Inventory- rised Fed. Acres	A			B			C			D			Sub D		
No.	Name		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres
5301	Highway Common	22,656	12,008	6,797	3,851	19,752	2,904	0	19,752	2,904	0	18,752	3,904	0	13,135	9,521	0
5303	West Toews	777	287	466	24	0	290	487	0	290	437	290	462	25	777	0	0
5304	East Toews	1,074	294	64	806	184	54	836	184	54	836	238	836	0	1,035	39	0
5305	Kunau	5,927	5,038	889	0	5,352	575	0	5,352	575	0	5,252	675	0	5,927	0	0
5306	No Mans Land	3,020	846	1,903	271	1,052	1,968	0	1,052	1,968	0	761	1,968	291	3,020	0	0
5307	Basalt Seeding	3,005	0	2,614	391	397	2,608	0	397	2,608	0	0	2,608	397	3,005	0	0
5308	Raft River	5,683	625	4,774	284	5,480	203	0	5,480	203	0	5,389	294	0	4,038	1,645	0
5309	Yale	3,527	0	3,527	0	3,527	0	0	3,527	0	0	3,527	0	0	0	3,527	0
Total		45,669	19,008	21,034	5,627	35,744	8,602	1,323	35,744	8,602	1,323	34,209	10,747	713	30,937	14,732	0

Management Area 13		Inventory- rized Fed. Acres	A			B			C			D			Sub D		
No.	Name		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres
5313	Chapin	2,575	695	1,880	0	2,317	258	0	1,899	676	0	699	1,876	0	2,480	95	0
5314	Dairy Springs	8,998	4,049	4,949	0	5,413	3,585	0	5,413	3,585	0	4,987	4,011	0	8,998	0	0
5315	Warm Springs	2,220	0	2,220	0	332	1,888	0	332	1,888	0	0	2,220	0	2,220	0	0
5321	Antelope	3,699	1,591	2,108	0	2,121	1,578 ¹	0	2,079	1,620	0	1,579	2,120	0	3,543	156	0
5322	Shirley Creek	680	680	0	0	680	0	0	680	0	0	680	0	0	680	0	0
5323	North Lake Fork	1,233	0	1,233	0	1,233	0	0	1,233	0	0	1,233	0	0	1,233	0	0
5324	South Lake Fork	1,079	442	637	0	829	250	0	829	250	0	488	591	0	1,079	0	0
5325	Sublett	743	0	743	0	137	606	0	137	606	0	0	743	0	743	0	0
5327	Meadow Creek	13,372	1,738	11,634	0	13,372	0	0	13,372	0	0	13,372	0	0	13,372	0	0
5328	Point	5,755	1,960	3,795	0	2,730	3,025	0	2,426	3,329	0	1,837	3,918	0	5,755	0	0
5348	Burnt Canyon	240	228	12	0	228	12	0	228	12	0	228	12	0	228	12	0
Total		40,594	11,383	29,211	0	29,392	11,202	0	28,628	11,936	0	25,103	15,491	0	40,331	263	0

Management Area 14		Inventory- ried Fed. Acres	A			B			C			D			Sub D		
No.	Name		Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres	Up Acres	Static Acres	Down Acres
4025	Simon Baker	120	78	7	35	78	7	35	78	7	35	78	7	35	120	0	0
4094	Churchill-Poulton	240	0	127	113	0	0	240	0	0	240	0	0	240	240	0	0
4133	Churchill Tracts	80	0	38	42	30	33	12	0	38	42	0	38	42	30	0	0
5054	Idahome Wildlife	280	0	179	101	0	179	101	0	179	101	0	179	101	0	179	101
5310	Gifford Springs	240	0	0	240	0	0	240	0	0	240	0	0	240	0	0	0
5311	Horse Butte	358	0	0	358	0	0	358	0	0	358	0	0	358	0	0	358
5312	Raft River Iso. #1	80	0	0	80	0	0	80	0	0	80	0	0	80	0	0	80
5337	Raft River Iso. #3	200	0	200	0	0	0	200	0	0	200	0	0	200	0	200	0
1031	Golden Valley Iso. Tract	40	0	10	30	0	10	30	0	10	30	0	10	30	0	10	30
1032	Churchill Tract	40	0	0	40	0	0	40	0	0	40	0	0	40	0	0	40
Total		1,673	78	561	1,039	108	434	1,136	78	434	1,166	78	434	1,166	440	389	849

APPENDIX H

METHODOLOGY FOR DETERMINING AND PROJECTING RANGE CONDITION

The existing or Alternative A range condition was determined on an individual allotment basis and range site by comparing the existing plant composition with the potential for the site, evaluating the current erosion stability and the existing vegetative stand for the site in relation to the site potential. The percent of the preferred species in relation to the site potential was also considered in determining current site conditions. A copy of the Range Condition worksheet/Observed Apparent Trend form is attached to the Apparent Trend Methodology.

Projections of range condition for Alternatives B, C, and D were made according to the following guidelines:

- a) If current trend is up, the conditions would go up one condition class.
- b) If the present trend is static, implementation of a management system or delaying spring turn-out, or reducing livestock numbers would cause conditions to go up one class unless the present condition is excellent.
- c) An area with a downward trend would stabilize at the current condition class if a grazing system were implemented or a reduction in use were made.
- d) Without a management system the existing downward trend would drop one condition class, if a reduction in use is not taken.
- e) If the current trend is up with grazing, then no grazing would raise the condition by two classes or to excellent.
- f) If the current trend is static with grazing, then no grazing would raise the condition by one class.
- g) If the current trend is down with grazing, then no grazing would stabilize the condition in its present class.

No.	Name	Invento- ried Fed. Acres	ALTERNATIVE A						ALTERNATIVE B						ALTERNATIVE C						ALTERNATIVE D						SUB ALTERNATIVE 0					
			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class					
			Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres			
4065	Milner-Holyoak	932	0	0	932 (100%)				0	634 (68%)	0	298 (32%)	0	200 (21%)	29 (3%)	703 (76%)	0	220 (24%)	712 (76%)	0	0	0	0	0	220 (24%)	712 (76%)	0	0				

[illegible]

Invento- ried Fed. Acres	A L T E R N A T I V E A						A L T E R N A T I V E C						A L T E R N A T I V E D						S U B A L T E R N A T I V E E							
	Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class				
	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres		
No. Name																										
Management Area 3																										
4026	Bruce Beske-Private	2,454	0	491	1,939	24	370	2,003	66	15	628	1,745	66	15	628	1,130	681	15	628	1,137	689	0				
4029	Karl E. Beske-Goose Creek	319	0	26	76	217	0	190	66	63	0	135	184	0	135	0	26	96	197	0	135	184	0			
4078	Wabey Goose Creek	1,842	203	258	1,087	294	482	1,149	101	110	482	1,149	101	110	482	1,149	101	110	482	1,149	101	110				
4088	Goose Creek-Mullen	558	0	134	22	402	174	58	163	163	174	58	160	166	174	5	379	0	174	5	163	216				
4093	Goose Creek-Poulton	6,088	0	304	5,723	61	2,955	2,216	840	77	2,955	2,216	840	77	2,955	2,216	840	77	2,955	2,216	840	77				
4099	Beaver Dam	2,346	0	141	1,713	492	335	920	843	248	335	920	843	248	335	609	1,154	248	335	609	1,154	248				
4100	North Emery	224	0	0	224	0	0	224	0	0	0	167	57	0	0	167	57	0	42	125	57	0				
4103	Shoulder "3" Inc.	4,537	0	1,089	2,768	680	2,049	1,647	754	87	2,049	1,647	754	87	3,389	1,055	6	87	2,049	1,647	841	0				
4104	Baker	2,639	0	1,187	1,003	449	1,583	304	745	7	1,583	304	745	7	1,807	825	7	0	1,583	224	825	7				
4105	Day	348	0	0	268	80	77	188	2	81	77	188	2	81	265	2	81	0	77	188	2	81				
4111	Warr-Pickett	5,751	1,150	403	4,198	0	1,545	957	3,249	0	1,545	957	3,249	0	1,966	3,785	0	0	1,545	421	3,785	0				
Total		27,106	1,353	4,033	19,021	2,699	9,570	9,856	6,829	851	9,828	9,351	6,952	975	12,001	10,969	3,402	734	9,870	7,856	8,641	739				
			(5%)	(15%)	(70%)	(10%)	(35%)	(37%)	(25%)	(3%)	(36%)	(34%)	(26%)	(4%)	(44%)	(40%)	(13%)	(3%)	(36%)	(29%)	(32%)	(3%)				

Appendix H (cont.)

Management Area 4	Invento- ried Fed. Acres	ALTERNATIVE A						ALTERNATIVE 8						ALTERNATIVE C						ALTERNATIVE 0						SUB ALTERNATIVE 0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Management Area 5	No.	Name	Inventoried Fed. Acres	ALTERNATIVE A						ALTERNATIVE 8						ALTERNATIVE C						ALTERNATIVE 0						SUB ALTERNATIVE 0					
				Condition Class			Fair	Poor	Acres	Condition Class			Fair	Poor	Acres	Condition Class			Fair	Poor	Acres	Condition Class			Fair	Poor	Acres	Condition Class			Fair	Poor	Acres
				Excellent	Good	Acres				Excellent	Good	Acres				Excellent	Good	Acres				Excellent	Good	Acres				Excellent	Good	Acres			
Administrative Site		19		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Inventoried Fed. Acres	Management Area 6 No. Name	ALTERNATIVE A						ALTERNATIVE 8						ALTERNATIVE C						ALTERNATIVE 0						SUB ALTERNATIVE 0						
		Condition Class			Fair	Poor	Acres	Condition Class			Fair	Poor	Acres	Condition Class			Fair	Poor	Acres	Condition Class			Fair	Poor	Acres	Condition Class			Fair	Poor	Acres	
		Excellent	Good	Acres				Excellent	Good	Acres				Excellent	Good	Acres				Excellent	Good	Acres				Excellent	Good	Acres				Excellent
1,694	007 Water Canyon	0	674	623	387		0	993	328	363		0	993	328	363		713	328	260	383		713	328	303	340							
1,461	009 Bridger Canyon	0	307	0	1,154		275	80	952	154		275	80	952	154		275	952	234	0		275	0	952	234							
326	010 View	0	163	26	137		0	149	0	177		0	133	0	193		0	133	0	193		0	133	0	42	151						
40	049 Marsh Creek Iso.	0	0	0	40		0	0	0	40		0	0	0	40		0	0	0	40		0	0	30	10							
160	052 North Albion	0	115	0	45		0	160	0	0		0	160	0	0		0	155	0	45		115	0	0	45							
3,671	Total	0	1,259	649	1,763		275	1,382	1,280	734		275	1,366	1,280	750		988	1,528	494	661		1,236	328	1,327	780							
			(34%)	(18%)	(48%)		(7%)	(38%)	(35%)	(20%)		(7%)	(37%)	(35%)	(21%)		(27%)	(42%)	(13%)	(18%)		(34%)	(9%)	(36%)	(21%)							

Management Area 7	Invento- ried Fed. Acres	ALTERNATIVE A						ALTERNATIVE 8						ALTERNATIVE C						ALTERNATIVE 0						SUB ALTERNATIVE 0							
		Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class				
		Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres				
No. Name																																	
4028 Bedke-Churchill	1,801	414	18	180	1,189	352	845	210	394	352	455	210	784	352	455	210	784	352	455	210	784	352	455	210	784	352	455	210	784	352	455		
4033 Callahan	809	0	0	582	227	0	809	0	0	0	625	184	0	225	270	314	0	0	225	270	314	0	0	225	270	314	0	0	225	270	314		
4034 Callahan-Matthews	67	0	0	0	67	0	0	0	67	0	0	0	67	0	0	0	67	0	0	0	67	0	0	0	67	0	0	0	67	0	0		
4056 Goose Creek-Fairchild	720	36	0	288	396	58	640	22	0	58	400	262	0	58	400	262	0	58	400	262	0	58	400	262	0	58	400	262	0	58	400		
4061 Hedges	160	0	0	85	75	0	0	88	72	0	0	88	72	0	0	88	72	0	0	88	72	0	0	88	72	0	0	88	72	0	0		
4064 Matthews-Churchill	120	0	120	0	0	120	0	0	0	120	0	0	0	120	0	0	0	120	0	0	0	120	0	0	0	120	0	0	0	120	0		
4080 Martin Goose Creek	367	0	0	114	253	0	187	57	123	0	67	57	243	0	67	57	243	0	67	57	243	0	67	57	243	0	67	57	243	0	67		
4082 Matthews-Goose Creek	820	0	344	205	271	0	216	241	363	0	216	241	363	145	312	259	104	216	312	259	104	216	312	259	104	216	312	259	104	216	312		
4083 Willow Creek-Anderson	571	0	251	320	0	0	250	321	0	0	250	321	0	250	321	0	0	250	321	0	0	250	321	0	0	250	321	0	0	250	321		
4084 Churchill-Matthews	1,476	0	310	177	989	0	1,245	199	32	0	783	199	494	283	199	189	805	283	199	189	805	283	199	189	805	283	199	189	805	283	199		
4086 Goose Creek-McIntosh	80	0	46	3	31	28	40	12	0	28	40	12	0	68	12	0	0	68	12	0	0	68	12	0	0	68	12	0	0	68	12		
4115 Big Cedar-Churchill	364	0	0	33	331	0	260	23	81	0	160	123	81	0	160	123	81	0	154	210	0	0	154	210	0	0	154	210	0	0	154	210	
4118 Birch Creek	695	0	76	167	452	0	362	186	147	0	362	186	147	272	209	147	67	272	209	147	67	272	209	147	67	272	209	147	67	272	209		
4128 Land Creek Iso.	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0		
4129 Fairchild Canyon	40	0	0	40	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	40	0	0	
4130 Land Creek	466	0	121	289	56	83	250	77	56	124	209	77	56	124	209	77	56	124	209	77	56	124	209	77	56	124	209	77	56	124	209		
4131 Mill Creek	240	24	48	7	161	24	48	7	161	24	48	7	161	24	48	7	161	24	48	7	161	24	48	7	161	24	48	7	161	24	48		
4132 Two Knobs	80	28	0	0	52	28	2	0	50	28	0	0	52	28	0	0	52	28	0	0	52	28	0	0	52	28	0	0	52	28	0	0	
5011 Pine Knob	399	0	164	115	120	0	202	84	113	0	135	151	113	135	151	8	105	135	151	8	105	135	151	8	105	135	151	8	105	135	151		
5012 Lunch Creek	2,009	0	1,286	522	201	1,425	584	0	0	1,425	584	0	0	1,984	0	25	0	1,984	0	25	0	1,984	0	25	0	1,984	0	25	0	1,984	0	25	
5013 Crystal	1,111	0	922	189	0	1,105	6	0	0	1,105	6	0	0	1,111	0	0	0	1,111	0	0	0	1,111	0	0	0	1,111	0	0	0	1,111	0	0	
5014 Marsh Creek	221	0	99	122	0	0	138	83	0	0	138	83	0	0	138	83	0	0	138	83	0	0	138	83	0	0	138	83	0	0	138	83	
5015 Howell Creek	840	0	0	815	25	0	840	0	0	3	500	337	0	3	837	0	0	3	837	0	0	3	837	0	0	3	837	0	0	3	837	0	0
5016 Sibley	724	0	0	724	0	0	724	0	0	0	300	424	0	0	652	72	0	0	652	72	0	0	652	72	0	0	652	72	0	0	652	72	
5017 Conner Creek	2,262	0	0	2,262	0	0	2,262	0	0	0	2,245	17	0	1,245	1,017	0	0	1,245	1,017	0	0	1,245	1,017	0	0	1,245	1,017	0	0	1,245	1,017	0	0
5018 South Corner	480	0	0	427	53	0	480	0	0	0	480	0	0	427	53	0	0	427	53	0	0	427	53	0	0	427	53	0	0	427	53	0	0
5019 Rocky Hollow	280	0	0	280	0	0	280	0	0	0	280	0	0	0	280	0	0	0	280	0	0	0	280	0	0	0	280	0	0	0	280	0	0
5021 Middle Hill	2,647	0	1,456	1,191	0	1,377	1,270	0	0	1,407	1,240	0	0	2,647	0	0	0	2,647	0	0	0	2,647	0	0	0	2,647	0	0	0	2,647	0	0	
5022 Grape Creek	916	0	0	916	0	0	916	0	0	0	400	516	0	0	916	0	0	0	916	0	0	0	916	0	0	0	916	0	0	0	916	0	0
5023 Cove	400	0	196	0	204	0	273	0	127	0	193	0	270	0	113	0	287	0	113	0	287	0	113	0	287	0	113	0	287	0	113	0	287
Total	21,205	502	5,457	9,137	6,109	4,600	13,159	1,610	1,826	4,674	10,156	3,495	2,880	9,568	6,041	2,280	3,316	6,591	6,808	5,496	2,310	6,591	6,808	5,496	2,310	6,591	6,808	5,496	2,310	6,591	6,808	5,496	
		(2%)	(26%)	(43%)	(29%)	(22%)	(62%)	(8%)	(8%)	(22%)	(48%)	(16%)	(14%)	(45%)	(28%)	(11%)	(16%)	(31%)	(32%)	(25%)	(11%)	(31%)	(32%)	(25%)	(11%)	(31%)	(32%)	(25%)	(11%)	(31%)	(32%)	(25%)	(11%)

Management Area 8	Invento- ried Fed. Acres	ALTERNATIVE A						ALTERNATIVE 8						ALTERNATIVE C						ALTERNATIVE 0						SUB ALTERNATIVE 0												
		Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class									
		Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres	Excellent Acres	Good Acres	Fair Acres	Poor Acres									
No. Name																																						
5024 Almo Creek	320	0	0	35	285	0	311	285	0	0	35	285	0	35	285	0	0	35	285	0	0	35	285	0	0	35	285	0	0	35	285	0	0					
5025 Graham Creek	845	0	0	490	355	0	311	534	0	0	311	534	0	0	311	534	0	0	273	572	0	0	273	572	0	0	273	572	0	0	273	572	0	0				
5026 Emery Creek	679	0	197	462	20	257	403	19	0	257	403	19	0	660	19	0	0	660	19	0	0	660	19	0	0	660	19	0	0	660	19	0	0					
5027 Circle Creek	1,068	0	0	160	908	0	553	494	21	0	201	846	21	0	184	0	0	184	0	1	1,046	21	0	1	1,046	21	0	1	1,046	21	0	1	1,046	21	0	1		
5028 Junction Creek	184	0	0	121	63	0	184	0	0	0	184	0	0	184	0	0	0	184	0	0	0	184	0	0	0	184	0	0	0	184	0	0	184	0	0			
5029 Trail Canyon	1,640	0	295	804	541	396	868	376	0	396	868	376	0	1,264	376	0	0	1,264	376	0	0	1,264	376	0	0	1,264	376	0	0	1,264	376	0	0	1,264	376	0	0	
5030 Tracy Lane	880	0	53	502	325	0	147	608	125	0	147	608	125	147	608	125	0	147	608	125	0	147	608	125	0	147	608	125	0	147	608	125	0	147	608	125	0	147
5031 Heath Canyon	1,464	0	0	0	1,464	0	55	0	1,409	0	0	0																										

Appendix H (cont.)

Invento- ried Fed. Acres	Management Area 9 No. Name	Condition Class						Condition Class						Condition Class						Condition Class																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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	5020 Idaho Iso.	780	0	0	70	710	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	780	0	0	0	

Management Area 12	Invento- ried Fed. Acres	ALTERNATIVE A						ALTERNATIVE B						ALTERNATIVE C						ALTERNATIVE D						SUB ALTERNATIVE E					
		Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class		
		Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres			
No. Name																															
5301 Highway Common	22,656	9,062	3,172	906	9,516	12,490	4,620	2,642	2,904	12,490	4,620	2,642	2,904	12,490	4,620	2,642	2,904	12,490	4,620	2,642	2,904	12,490	4,620	2,642	2,904	12,490	4,620	2,642	2,904		
5303 West Toews	777	0	715	0	62	0	290	426	61	0	290	426	61	0	290	426	61	0	290	426	61	0	290	426	61	0	290	426	61		
5304 East Toews	1,074	43	161	310	569	184	0	297	593	184	0	297	593	184	0	297	593	184	0	297	593	184	0	297	593	184	0	297	593		
5305 Kunau	5,927	0	5,097	830	0	5,252	492	183	0	5,252	492	183	0	5,252	492	183	0	5,252	492	183	0	5,252	492	183	0	5,252	492	183	0		
5306 No Mans Land	3,020	0	1,057	936	1,027	761	498	700	1,061	761	498	700	1,061	761	498	700	1,061	761	498	700	1,061	761	498	700	1,061	761	498	700			
5307 Basalt Seedling	3,005	0	2,134	871	0	0	2,516	489	0	0	2,516	489	0	0	2,516	489	0	0	2,516	489	0	0	2,516	489	0	0	2,516	489	0		
5308 Raft River	5,683	1,478	1,875	1,080	1,250	3,722	571	1,255	135	3,722	571	1,255	135	3,722	571	1,255	135	3,722	571	1,255	135	3,722	571	1,255	135	3,722	571	1,255			
5309 Yale	3,527	0	0	0	0	3,527	0	0	0	0	3,527	0	0	0	3,527	0	0	0	3,527	0	0	0	3,527	0	0	0	3,527	0	0		
Total	45,669	14,110	14,211	4,924	12,424	25,936	8,987	5,992	4,754	25,936	8,987	5,992	4,754	25,936	8,987	5,992	4,754	25,936	8,987	5,992	4,754	25,936	8,987	5,992	4,754	25,936	8,987	5,992			
		(31%)	(31%)	(11%)	(27%)	(57%)	(20%)	(13%)	(10%)	(57%)	(20%)	(13%)	(10%)	(57%)	(20%)	(13%)	(10%)	(57%)	(20%)	(13%)	(10%)	(57%)	(20%)	(13%)	(10%)	(57%)	(20%)	(13%)	(10%)		

Inventoried Fed. Acres	No. Name	ALTERNATIVE A						ALTERNATIVE B						ALTERNATIVE C						ALTERNATIVE D					
		Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class					
		Excellent	Good	Poor	Excellent	Good	Poor	Excellent	Good	Poor	Excellent	Good	Poor	Excellent	Good	Poor	Excellent	Good	Poor	Excellent	Good	Poor			
		Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres			
2,575	313 Chapin	103	927	1,391	154	137	2,275	0	163	794	1,430	188	163	794	230	1,388	163	1,024	1,388	163	0				
8,998	314 Dairy Springs	0	5,939	2,699	360	3,995	4,702	232	69	3,995	4,702	232	69	2,392	6,315	232	69	8,697	231	70	0				
2,220	315 Warm Springs	0	710	1,510	0	0	1,145	891	184	0	1,145	891	184	0	813	1,223	184	813	1,223	124	0				
3,699	321 Antelope	148	1,406	1,997	148	156	3,387	156	0	156	3,345	198	0	156	2,845	698	0	3,001	598	0	0				
680	322 Shirley Creek	0	680	0	0	271	409	0	0	480	200	0	0	680	0	0	0	680	0	0	0				
1,233	323 North Lake Fork	0	481	752	0	446	787	0	0	471	762	0	0	471	762	0	0	471	762	0	0				
1,079	324 South Lake Fork	0	442	637	0	488	341	250	0	488	341	250	0	488	591	0	0	488	591	0	0				
743	325 Sublett	0	476	267	0	0	596	147	0	0	596	147	0	459	284	0	0	459	284	0	0				
13,372	327 Meadow Creek	0	936	12,436	0	3,482	8,562	1,240	88	3,482	8,562	1,240	88	12,044	1,240	0	88	12,044	0	1,328	0				
5,755	328 Point	0	3,480	2,275	0	1,019	2,895	1,841	0	1,019	2,590	2,146	0	3,021	2,734	0	0	3,021	2,734	0	0				
240	348 Burnt Canyon	0	192	48	0	180	60	0	0	180	60	0	0	180	60	0	0	240	0	0	0				
40,594	Total	251	15,669	24,012	662	10,174	25,159	4,757	504	11,065	23,733	5,292	504	20,675	15,874	3,541	504	30,938	7,911	1,745	0				
		(1%)	(38%)	(59%)	(2%)	(25%)	(62%)	(12%)	(1%)	(27%)	(59%)	(13%)	(1%)	(51%)	(39%)	(9%)	(1%)	(76%)	(20%)	(4%)					

Management Area 14	Invento- ried Fed. Acres	ALTERNATIVE A						ALTERNATIVE B						ALTERNATIVE C						ALTERNATIVE D						SUB ALTERNATIVE E					
		Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class			Condition Class		
		Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres	Excellent Acres	Good Acres	Poor Acres			
No. Name																															
025 Simon Baker	120	0	120	0	0	78	7	35	0	78	7	35	0	78	7	35	0	78	7	35	0	78	7	35	0	20	100	0	0		
094 Churchill-Poulton	240	0	0	0	240	0	0	0	240	0	0	0	240	0	0	0	240	0	0	0	240	0	0	0	0	85	155	0	0		
133 Churchill Tracts	80	0	0	0	80	0	30	0	50	0	0	0	80	0	0	0	80	0	0	0	80	0	0	38	42	0	0	38	42		
054 Idahome Wildlife	280	0	17	67	196	0	16	0	264	0	16	0	264	0	16	0	264	0	16	0	264	0	16	0	231	33	0	231	33		
310 Gifford Springs	240	0	0	240	0	0	0	0	240	0	0	0	240	0	0	0	240	0	0	0	240	0	0	0	0	240	0	0	240	0	
311 Horse Butte	358	0	0	0	358	0	0	0	358	0	0	0	358	0	0	0	358	0	0	0	358	0	0	0	0	0	0	0	358	0	
312 Raft River Iso. #1	80	0	0	0	80	0	0	0	80	0	0	0	80	0	0	0	80	0	0	0	80	0	0	0	0	0	0	0	80	0	
337 Raft River Iso. #3	200	0	40	160	0	0	40	160	0	0	40	160	0	0	40	160	0	0	40	160	0	0	40	160	0	0	160	0	0	0	
031 Golden Valley Iso. Tract	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	0	10	30	0	0	30	
032 Churchill Tract	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	40	0	0	0	0	0	0	0	40	0	
Total	1,678	0	177	467	1,034	78	93	195	1,312	78	63	195	1,312	78	63	195	1,312	78	63	195	1,312	78	63	195	1,312	76	260	604	738	404	
		(11%)	(11%)	(29%)	(61%)	(5%)	(6%)	(11%)	(78%)	(5%)	(4%)	(11%)	(80%)	(5%)	(4%)	(11%)	(80%)	(5%)	(4%)	(11%)	(80%)	(5%)	(4%)	(11%)	(5%)	(15%)	(36%)	(44%)	(44%)	(44%)	

APPENDIX I

VEGETATIVE COVER FACTOR METHODOLOGY

Alternative "A" Existing Situation

Vegetative cover from the 417 forms was averaged for each clip site. Then the cover from each clip site within an allotment was weighted by acreage of each clip site for the allotment to come up with a weighted average cover for the allotment. This same procedure was used to derive the weighted average cover from the Range Condition worksheets (RCW) in each allotment. Then the weighted average 417 and RCW results were averaged to get an overall average vegetative cover for each allotment.

Example: 417 weighted average = 31 percent
RCW weighted average = $\frac{29}{60} \div 2 = 30$ percent

Average cover for allotment = 30 percent

Alternatives B, C, and D

Factors considered when projecting vegetative cover for Alternatives B, C, and D included proposed land treatment, proposed grazing systems, existing trend and conditions, any proposed livestock use adjustment, which includes change in numbers or season of use. Although climatic factors play a very important part in vegetative cover change, they were not considered due to the lack of man's control over them.

Factors that result in a positive vegetative cover change:

- a) Grazing system - provides for more control of vegetation removal.
- b) Upward existing trend - indicates vegetation is improving.
- c) Reduction in livestock numbers or grazing pressure.
- d) Later spring turn-out date - this allows the plants to produce more foliage before initial grazing takes place which in turn increases the plants ability to provide for its own physiological needs as well as provide a greater volume of forage for livestock.
- e) Land treatment - reduces grazing pressure on native range as well as providing long-term perennial vegetative cover.

Factors that result in a negative vegetative cover change:

- a) Earlier spring turn-out - reverse of "d" above.
- b) Increase in livestock numbers without shortening grazing season.
- c) Downward trend - indicates vegetation is not improving.
- d) No livestock use adjustment when condition, trend, and utilization are not satisfactory.

Changes in vegetative cover are more rapid when more of the above are working together.

OBSERVED APPARENT TREND - Range Condition

		Possible Points	Rating*	Remarks
1.A. <u>VEGETATION</u> <u>SEEDED</u>	More than 50 percent of the total vegetation is composed of the seeded species. If shrubs are present, the seeded species occur mainly in open spaces between shrubs. Undesirable annual vegetation is absent or nearly so.	5-6		
	25 to 50 percent of the vegetation is composed of the seeded species. If shrubs are present, some seeded species occur in open, unprotected areas. Limited amounts of undesirable annual vegetation are present.	3-4		
	Less than 25 percent of the vegetation is composed of the seeded species. Seeded species are generally protected by shrubs or rocks. There is an over-abundance of undesirable annuals and/or shrubs.	0-2		
1.B. <u>VEGETATION</u> <u>NATIVE</u>	There is, or tends to be, a heterogeneous mixture of grasses, forbs, and shrubs across the landscape. Major native forage grasses occur in open, unprotected areas. Invaders or unnatural annual vegetation is less than 5 percent. Browse species show no evidence of hedging.	5-6		
	Areas of pure stands of undesirable perennials or invading annuals are present. Some major native forage plants occur in open, unprotected areas. Invader or unnatural annuals make up less than 15 percent of the production. Browse species show moderate hedging.	3-4		
	Poor variation exists among grasses, forbs, and shrubs, with an over-abundance of undesirable annuals or shrubs. Major native forage species are generally protected by shrubs or rocks. Browse species showing heavy hedging.	0-2		
2. <u>VIGOR</u>	Desirable grasses, forbs, and shrubs are vigorous--showing good health. These plants should have good size, color, and should produce abundant herbage.	7-10		
	Desirable grasses, forbs, and shrubs have moderate vigor. They are medium-size with fair color and producing moderate amounts of herbage; some seed stalks and seedheads are present.	3-6		
	Desirable grasses, forbs, and shrubs have low vigor. They appear unhealthy with small size and poor color. Portions of clumps or entire plants are dead or dying. Seed stalks and seedheads almost non-existent except in protected areas.	0-2		
3. <u>AGE CLASS DISTRIBUTION AND REPRODUCTION</u>	There is seedling establishment (plants over two years old) of desirable climax species in open spaces between plants and along edges of soil pedestals. There is evidence that the older, less desirable plants are dying and are being replaced by the desirable climax species.	7-10		
	Seedlings of individual species are becoming established at about the same rate as the older plants are dying. There is little evidence of change in species composition. Seedlings are primarily in protected spots.	3-6		
	Mature and dying plants are being replaced by seedlings of invader species or undesirable climax species. Any seedlings of the desirable species are found only in protected areas.	0-2		
4. <u>SURFACE LITTER</u>	Surface litter is accumulating in place.	5		
	Moderate movement of surface litter is apparent and deposited against obstacles.	4		
	Very little surface litter is remaining.	0-3		
5. <u>SOIL MOVEMENT</u>	None or slight visual evidence of soil movement. No exposed roots.	4-5		
	Moderate movement of soil particles visible. Some plants have roots exposed.	2-3		
	Movement occurs with each event. Soil and debris deposited against minor obstructions. Terracing may be present. Many plants have roots exposed.	0-1		
		Total		

*See instructions.

7-18 Downward
19-26 Static
27-36 Upward

General Remarks:

VEGETATIVE COVER

Management Area 1		Inventoried Fed. Acres	Alternative (% of Veg. Cover)				
No.	Name		A	B	C	D	Sub D
4065	Milner-Holyoak	932	34	34	36	35	37
	Weighted Average	932	34	34	36	35	37

Management Area 2		Inventoried Fed. Acres	Alternative (% of Veg. Cover)				
No.	Name		A	B	C	D	Sub D
4025	Simon Baker	224	18	19	19	19	19
4032	Dry Creek-Artesian	3,264	37	37	38	39	39
4067	Buckhorn-Churchill	7,876	30	29	30	31	32
4068	Dry Creek	7,161	34	35	35	36	36
4069	Artesian-Kidd	4,869	34	34	34	34	35
4071	Artesian Kidd Iso.	243	29	29	29	29	29
4075	Marion Group	4,422	37	38	38	39	39
4081	Cold Spring	9,311	26	28	28	27	28
4087	Churchill-Mullen	1,280	21	23	23	22	24
4094	Churchill-Poulton	4,305	31	33	33	32	33
4110	Pickett-Wake	5,301	28	28	28	30	32
	Weighted Average	48,256	31	32	32	32	33

Management Area 3		Inventoried Fed. Acres	Alternative (% of Veg. Cover)				
No.	Name		A	B	C	D	Sub D
4026	Bruce Bedke-Private	2,454	37	38	38	38	39
4029	Karl E. Bedke-Goose Creek	319	19	20	19	19	19
4078	Mabey Goose Creek	1,842	27	28	28	28	29
4088	Goose Creek-Mullen	558	21	22	23	23	24
4093	Goose Creek-Poulton	6,088	27	28	28	28	29
4099	Beaver Dam	2,346	37	38	38	38	39
4100	North Emery	224	23	24	24	24	25
4103	Shoulder "3" Inc.	4,537	33	34	34	35	35
4104	Baker	2,639	29	30	30	30	30
4105	Day	348	25	25	26	27	27
4111	Warr-Pickett	5,751	34	34	34	35	36
	Weighted Average	27,106	31	32	32	32	33

Management Area 4		Inventoried Fed. Acres	Alternative (% of Veg. Cover)				
No.	Name		A	B	C	D	Sub D
4027	Goose Creek Group	28,730	27	28	28	28	29
4052	Critchfield-Ind.	211	24	24	24	25	27
4062	Harper-Goose Creek	338	23	23	23	24	26
4070	Worthington Springs	1,027	26	27	28	28	28
4089	Goose Creek-Ward	411	48	47	48	48	50
4090	Goose Creek	266	33	33	33	33	35
4112	Alastra	1,983	29	30	30	31	32
4113	Earl Whiteley	1,482	28	30	30	30	30
4116	Marchant-Goose Creek	1,034	23	25	25	24	24
4117	Goose Creek Private #1	2,401	42	41	41	42	44
4120	Junction Valley Parcels	149	22	22	22	22	22
4127	Stone Cabin Iso.	159	17	17	17	18	19
4134	Robinson Hole	1,507	43	43	43	43	43
4140	Birch Creek Parcels	250	34	35	34	34	34
	Weighted Average	39,948	29	30	30	30	31

Management Area 5		Inventoried Fed. Acres	Alternative (% of Veg. Cover)				
No.	Name		A	B	C	D	Sub D
-	Administrative Site	19	--	--	--	--	--

Management Area 6		Inventoried Fed. Acres	Alternative (% of Veg. Cover)				
No.	Name		A	B	C	D	Sub D
5007	Water Canyon	1,684	30	31	31	32	32
5009	Bridger Canyon	1,461	31	31	32	32	34
5010	View	326	26	25	26	26	27
5049	Marsh Creek Iso.	40	34	34	34	34	34
5052	North Albion	160	39	40	40	39	39
	Weighted Average	3,671	30	31	31	32	33

Management Area 7		Inventoried Fed. Acres	Alternative (% of Veg. Cover)				
No.	Name		A	B	C	D	Sub D
4028	Bedke-Churchill	1,801	21	21	22	21	24
4033	Callahan	809	22	22	23	24	24
4034	Callahan-Matthews	67	23	22	22	23	23
4056	Goose Creek-Fairchild	720	30	31	32	32	33
4061	Hedges	160	28	29	29	30	30
4064	Matthews-Churchill	120	40	41	41	41	41
4080	Martin Goose Creek	367	23	24	25	25	26
4082	Matthews-Goose Creek	820	17	17	18	19	19
4083	Willow Creek-Anderson	571	40	40	40	41	42
4084	Churchill-Matthews	1,476	19	19	19	20	22
4086	Goose Creek-McIntosh	80	28	28	29	30	30
4115	Big Cedar-Churchill	364	27	27	28	28	30
4118	Birch Creek	695	36	37	37	37	39
4128	Land Creek Iso.	40	32	32	32	32	32
4129	Fairchild Canyon	40	40	41	41	40	42
4130	Land Creek	466	37	38	38	38	39
4131	Mill Creek	240	31	31	31	31	34
4132	Two Knobs	80	19	19	19	20	21
5011	Pine Knob	399	31	31	31	32	33
5012	Lunch Creek	2,009	36	37	37	38	38
5013	Crystal	1,111	27	27	27	28	28
5014	Marsh Creek	221	41	41	41	41	43
5015	Howell Creek	840	28	30	30	29	30
5016	Sibley	724	20	22	22	21	22
5017	Conner Creek	2,262	26	28	28	27	28
5018	South Conner	480	34	35	35	35	36
5019	Rocky Hollow	280	33	34	34	34	35
5021	Middle Hill	2,647	45	47	47	46	46
5022	Grape Creek	916	36	37	37	37	39
5023	Cove	400	27	28	28	28	29
	Weighted Average	21,205	30	31	31	31	32

Management Area 8		Inventoried Fed. Acres	Alternative (% of Veg. Cover)				
No.	Name		A	B	C	D	Sub D
5024	Almo Creek	320	37	37	37	38	40
5025	Graham Creek	845	30	31	32	32	32
5026	Emery Creek	679	33	34	35	35	35
5027	Circle Creek	1,068	22	23	23	23	25
5028	Junction Creek	184	41	41	41	42	43
5029	Trail Canyon	1,640	33	33	33	34	35
5030	Tracy Lane	880	21	21	21	22	23
5031	Heath Canyon	1,464	26	26	25	25	25
5032	Smoky Mountain	1,335	16	16	16	16	19
5033	Moulton	383	16	17	17	17	18
5034	State Line	305	21	22	22	22	24
5035	Sparks Basin	1,919	20	21	21	21	23
5036	Junction Seeding	6,520	23	24	24	24	25
5053	Almo	80	47	46	46	47	47
	Weighted Average	17,622	24	25	25	25	26

Appendix I (cont.)

Management Area 9		Inventoried Fed. Acres	Alternative (% of Veg. Cover)			
No.	Name		A	B	C	D
5020	Idahome Iso.	780	33	34	34	34
5037	Almo Flat	1,174	30	32	32	32
5038	Cole Lane	624	28	28	28	29
5039	Gully	4,515	27	28	28	28
5040	Johnson Creek	2,080	16	16	16	16
5041	E-Y Flat	4,818	21	21	21	21
5042	George Creek	2,747	35	36	36	36
5043	Narrows Seeding	3,807	30	31	31	31
5044	State Spring	1,008	36	37	37	37
5045	Clear Creek	10,240	43	45	45	44
5046	Ward E-Y	960	27	27	27	28
5047	South Bridge	1,056	30	29	29	29
5048	Naf	734	37	35	36	36
5050	Glen	160	31	31	31	31
5320	Warm Creek	24,039	37	38	37	37
5326	Point Springs	8,227	31	31	31	31
5328	Point	12,786	32	32	32	33
5330	Sandrock	3,144	25	26	27	27
5331	Bridge	11,856	38	38	39	39
5332	Strevell	6,049	23	24	24	25
5333	Green Canyon	442	35	37	36	38
5336	Raft River Iso. #2	518	17	19	18	17
5338	Sublett Road Triangle	603	32	33	32	32
5339	H P & P	283	37	38	38	37
5340	Round Mountain	296	47	48	47	47
5341	Valley	320	31	32	32	31
5342	Railroad Grade	492	31	31	31	30
5343	Landing Field	960	40	41	40	39
5344	DOE	560	31	32	31	31
5345	Strip	280	29	29	29	29
5346	Cemetery	160	30	30	30	30
5347	Idahome Interchange	90	40	40	40	40
Weighted Average		105,808	33	34	34	33

Management Area 10		Inventoried Fed. Acres	Alternative (% of Veg. Cover)			
No.	Name		A	B	C	D
5003	Jim Sage	66,417	26	28	28	28
5004	Cassia Creek	3,902	23	25	25	25
5005	Almo-Womack	4,195	23	25	25	25
5006	Chokecherry	737	22	24	24	24
5051	Keogh	1,046	35	36	36	35
Weighted Average		6,297	26	28	28	28

Management Area 11		Inventoried Fed. Acres	Alternative (% of Veg. Cover)			
No.	Name		A	B	C	D
5001	North Cotterel	9,946	40	42	42	42
5002	South Cotterel	29,517	27	28	28	28
5057	Weigh Station	1,044	37	38	38	38
Weighted Average		40,507	30	32	32	32

Management Area 12		Inventoried Fed. Acres	Alternative (% of Veg. Cover)			
No.	Name		A	B	C	D
5301	Highway Common	22,656	37	39	39	39
5303	West Toevs	777	46	46	46	47
5304	East Toevs	1,074	40	40	40	41
5305	Kunau	5,927	36	36	36	37
5306	No Mans Land	3,020	33	31	31	35
5307	Basalt Seeding	3,005	32	30	30	34
5308	Raft River	5,683	35	36	36	36
5309	Yale	3,527	29	30	30	30
Weighted Average		45,669	36	37	37	37

Management Area 13		Inventoried Fed. Acres	Alternative (% of Veg. Cover)			
No.	Name		A	B	C	D
5313	Chapin	2,575	44	44	44	44
5314	Dairy Springs	8,998	55	56	57	57
5315	Warm Springs	2,220	46	47	47	48
5321	Antelope	3,699	39	40	40	41
5322	Shirley Creek	680	30	31	31	31
5323	North Lake Fork	1,233	29	30	30	31
5324	South Lake Fork	1,079	31	31	31	32
5325	Sublett	743	41	41	41	42
5327	Meadow Creek	13,372	43	44	44	44
5328	Point	5,755	32	32	32	33
5348	Burnt Canyon	240	37	38	38	38
Weighted Average		40,594	43	44	44	45

Management Area 14		Inventoried Fed. Acres	Alternative (% of Veg. Cover)			
No.	Name		A	B	C	D
4025	Simon Baker	120	18	19	19	19
4094	Churchill-Poulton	240	31	31	31	31
4133	Churchill Tracts	80	36	34	34	35
5054	Idahome Wildlife	280	33	33	33	33
5310	Gifford Springs	240	33	32	32	32
5311	Horse Butte	358	29	28	28	28
5312	Raft River Iso. #1	80	22	21	21	21
5337	Raft River Iso. #3	200	31	31	31	31
1031	Golden Valley Iso. Tract	40	32	31	31	31
1032	Churchill Tract	40	40	39	39	39
Weighted Average		1,678	30	30	30	31

APPENDIX J

Visual Resource Inventory Methodology

The BLM has established a systematic approach to doing inventories of visual resources and setting minimum standards for management of these resources (BLM Manual 8410-11).

A four-step process is used to determine Visual Resource Management (VRM) classes. These steps are: (1) determining scenic quality, (2) determining visual sensitivity, (3) determining distance zones, and (4) combining these factors on a three-way matrix.

Scenic quality is rated on the basis of landform, color, water, vegetation, uniqueness, intrusions, and influence of adjacent scenery. Numerical values are assigned to these factors according to a given set of criteria for each factor. Areas to be rated for aesthetic quality (scenic quality rating units) are delineated on an overlay according to their similar physiographic and visual patterns, and their similar impacts from intrusions (human degradation of scenery). These units are rated either A (high), B (moderate) or C (low) quality scenery. (See Illustrations 4, 5.)

The second step in the analysis is the determination of visual sensitivity levels (an index to the relative degree of human response to visual changes). The criteria for determining visual sensitivity are user volume (both vehicular and pedestrian) and expressed user attitudes toward change. Based on these criteria, areas of similar sensitivity are mapped. (See Illustration 17.)

Thirdly, visual distance zones are identified as either foreground-middleground, background, or seldom seen areas. Distance zones are determined in the field by actually traveling along each route and observing the area that can be viewed, then delineating the zones on an overlay.

Upon completion of these steps, scenery quality, visual sensitivity, and distance zones are overlaid to determine areas with different ratings. A three-way matrix (Illustration 23) combining these elements is utilized to determine the VRM class ratings. These Visual Resource Management classes provide guidelines or criteria for analysis of proposed management practices, project locations, and design in order to provide the desired protection, rehabilitation, or enhancement of the visual resources.

Scenic Quality - Inventory and Evaluation Chart

INSTRUCTIONS

SCENIC QUALITY INVENTORY AND EVALUATION CHART

key factors

rating criteria and score

landform	High vertical relief as expressed in prominent cliffs, spires or massive rock outcrops; <u>or</u> severe surface variation or highly eroded formations including major badlands or dune systems; <u>or</u> detail features dominant and exceptionally striking and intriguing such as glaciers.	Steep canyons, mesas, buttes, cinder cones and drumlins; <u>or</u> interesting erosional patterns or variety in size and shape of landforms; <u>or</u> detail features present and interesting though not dominant or exceptional.	Low, rolling hills, foothills <u>or</u> flat valley bottoms. Interesting detail landscape features few or lacking.	5 3 1
vegetation	A variety of vegetative types as expressed in interesting forms, textures, and patterns.	Some variety of vegetation, but only one or two major types.	Little or no variety or contrast in vegetation.	5 3 1
water	Clear and clean appearing, still, cascading white water, any of which are a dominant factor in the landscape.	Flowing, or still, but not dominant in the landscape.	Absent, or present, but not noticeable.	5 3 0
color	Rich color combinations, variety or vivid color; <u>or</u> pleasing contrasts in the soil, rock, vegetation, water or snow fields.	Some intensity or variety in colors and contrast of the soil, rock and vegetation, but not a dominant scenic element.	Subtle color variations, contrast or interest; generally mute tones.	5 3 1
influence of adjacent scenery	Adjacent scenery greatly enhances visual quality.	Adjacent scenery moderately enhances overall visual quality.	Adjacent scenery has little or no influence on overall visual quality.	5 3 0
scarcity	One of a kind; <u>or</u> unusually memorable, <u>or</u> very rare within region. Consistent chance for exceptional wildlife or wild-flower viewing, etc.	Distinctive, though somewhat similar to others within the region.	Interesting within its setting, but fairly common within the region.	6 2 1
cultural modifications	Free from aesthetically undesirable or discordant sights and influences; <u>or</u> modifications add favorably to visual variety.	Scenic quality is somewhat depreciated by inharmonious intrusions, but not so extensive that the scenic qualities are entirely negated <u>or</u> modifications add little or no visual variety to the area.	Modifications are so extensive that scenic qualities are for the most part nullified or substantially reduced.	2 0 -4

Purpose: To rate the visual quality of the scenic resource on all BLM managed lands.

How to Identify Scenic Value: All Bureau lands have scenic value.

How to Determine Minimum Suitability: All BLM lands are rated for scenic values. Also rate adjacent or intermingling non-BLM lands within the planning unit.

When to Evaluate Scenic Quality: Rate for scenery under the most critical conditions (i.e., highest user period or season of use, sidelight, proper atmospheric conditions, etc.).

How to Delineate Rating Areas: Consider the following factors when delineating rating areas.

1. Like physiographic characteristics (i.e., land form, vegetation, etc.)
2. Similar visual patterns, texture, color, variety, etc.
3. Areas which have a similar impact from cultural modifications (i.e., roads, historical and other structures, mining operations, or other surface disturbances).

Explanation of Criteria (See Illustration 5.)

NOTE: Values for each rating criteria are maximum and minimum scores only. It is also possible to assign scores within these ranges.

SCENIC QUALITY

A = 19-33

B = 12-18

C = 0-11

8411 - UPLAND VISUAL RESOURCE INVENTORY AND EVALUATION

Scenic Quality - Explanation of Rating Criteria

landform

Topography becomes more interesting as it gets steeper or more massive, or more severely or universally sculptured. Outstanding landforms may be monumental, as the Grand Canyon, the Sawtooth Mountain Range in Idaho, the Wrangell Mountain Range in Alaska, or they may be exceedingly artistic and subtle as certain badlands, pinnacles, arches and other extraordinary formations.

vegetation

Give primary consideration to the variety of patterns, forms, and textures created by plant life. Consider short-lived displays when they are known to be recurring or spectacular. Consider also smaller scale vegetational features which add striking and intriguing detail elements to the landscape; e.g., gnarled or windbeaten trees, Joshua trees, etc.

water

That ingredient which adds movement or serenity to a scene. The degree to which water dominates the scene is the primary consideration in selecting the rating score.

color

Consider the overall color(s) of the basic components of the landscape (i.e., soil, rock, vegetation, etc.) as they appear during seasons or periods of high use. Key factors to use when in rating "color" are variety, contrast and harmony.

adjacent scenery

Degree to which scenery outside the scenery unit being rated enhances the overall impression of the scenery within the rating unit. The distance which adjacent scenery will influence scenery within the rating unit will normally range from 0-5 miles, depending upon verticality of topography, vegetative cover and other such factors. This factor is generally applied to units which would normally rate very low in score, but the influence of the adjacent unit would enhance the visual quality and raise the score.

scarcity

This factor provides an opportunity to give added importance to one or all of the scenic features that appear to be relatively unique or rare within one physiographic region. There may also be cases where a separate evaluation of each of the key factors does not give a true picture of the overall scenic quality of an area. Often it is a number of not so spectacular elements in the proper combination that produces the most pleasing and memorable scenery - the scarcity factor can be used to recognize this type of area and give it the added emphasis it needs.

cultural modifications

Consider the impact of change on the visual quality of the characteristic landscape. Cultural modifications in the landform/water, vegetation and addition of structures should be considered and may detract from the scenery in the form of a negative intrusion or actually complement or improve the scenery quality of a unit. Be careful not to confuse interest with scenery quality. Rate accordingly.

8411 - UPLAND VISUAL RESOURCE INVENTORY AND EVALUATION

Matrix for Determining Visual Sensitivity Levels

user attitude quantity of use		
H	H	HIGH SENSITIVITY
H	M	
M	H	
H	L	
L	H	MEDIUM SENSITIVITY
M	M	
M	L	
L	M	LOW SENSITIVITY
L	L	

NOTE: User attitude will take precedence over quantity of use for this evaluation.

- 1 SCENIC QUALITY.....A, B, C
8411
- 2 VISUAL SENSITIVITY LEVEL.....high, medium, low
8411
.
- 3 DISTANCE ZONES.....fg-mg - foreground-middleground
8411 bg - background
 ss - seldom-seen
- 4 MANAGEMENT CLASSES.....I, II, III, IV
8411
- 5 If the area being evaluated is adjacent to any VRM
class III or higher, select class III; if lower,
select VRM class IV.

Future and potential Class A areas or sites (identified in Recreation Information System) will be analyzed in Recreation **URA 3 and 4. Recommendations for MFP 1 (Recreation) should specify VRM Class I, II, III to ensure future site or area protection.**

Livestock Forage Lost Via Land Transfer

Management Area 2		Inventoried		A		B		C		D	
No.	Name	Federal Acres	Transfer Acreage	AIMs	Transfer Acreage	AIMs	Transfer Acreage	AIMs	Transfer Acreage	AIMs	Transfer Acreage
4025	Simon Baker	224	224	65							
4032	Dry Creek-Artesian	3,264									
4067	Buckhorn-Churchill	7,876	576	29							
4068	Dry Creek	7,161	400	54	400	41	400	41	400		
4069	Artesian-Kidd	4,869									
4071	Artesian-Kidd Iso.	243									
4075	Marion Group	4,422	720	80							
4081	Gold Spring	9,311									
4087	Churchill-Mullen	1,280									
4094	Churchill-Poulton	4,305	1,360	142		600	54				
4110	Pickett-Wake	221	3,440	221							
		48,256	6,720	591	1,000	95	400	41	400	41	0

Management Area 3		A		B		C	
No.	Name	Federal Acres	Transfer Acreage	AIMs	Transfer Acreage	AIMs	Transfer Acreage
4026	Bruce Bakke-Private	2,454					
4029	Karl E. Bakke-Goose Creek	319					
4078	Mabely Goose Creek	1,842					
4088	Goose Creek-Mullen	558					
4093	Goose Creek-Poulton	6,088					
4099	Goose Creek-Poulton	2,346					
4099	Beaver Dam	224					
4100	North Emery						
4103	Shoulder "3" Inc.	2,453	20	3	20	3	
4104	Baker	2,639	180	9	180	9	
4105	Day	348					
4111	Harr-Pickett	5,751	200	12	200	12	
27,106			0	0	0	0	0
Inventoried Federal Acres							
Management Area 4		A		B		C	
No.	Name	Federal Acres	Transfer Acreage	AIMs	Transfer Acreage	AIMs	Transfer Acreage
4027	Goose Creek Group	28,730					
4052	Critchfield-Ind.	211					
4062	Harper-Goose Creek	338					
4070	Worthington Springs	1,027					
4089	Goose Creek-Ward	411					
4090	Goose Creek	266	260	7	260	7	
4111	Alastra	1,983	266	70	266	70	
4112	Alastra	266	80	8	80	8	
4113	Earl Whiteley	1,482					
4116	Marchant-Goose Creek	1,034					
4117	Goose Creek Private #1	2,401					
4120	Junction Valley Parcels	149	91	0	91	0	
4127	Stone Cabin Iso.	159					
4130	Robinson Hole	1,507	938	0	938	0	
4134	Robinson Hole	250	210	0	210	0	
4140	Birch Creek Parcels	39,948	0	0	3,699	435	3,299
							359
Inventoried Federal Acres							

Management Area 5 No. Name	A		B		C		D
	Inventoried Federal Acres	Transfer Acreage	AIMS	Transfer Acreage	AIMS	Transfer Acreage	
Administrative Site	19						

Management Area 6 No. Name	A		B		C		D
	Inventoried Federal Acres	Transfer Acreage	AIMS	Transfer Acreage	AIMS	Transfer Acreage	
5007 Water Canyon	1,684			160	20	160	20
5009 Bridger Canyon	1,461						
5010 View	326			326	34		
5049 Marsh Creek Iso.	40			40	0		
5052 North Albion	160			160	0		
	3,671	0	0	686	54	160	20

Management Area 7		Inventoried Federal	A		B		C		D
No.	Name		Transfer Acreage	AMS	Transfer Acreage	AMS	Transfer Acreage	AMS	Transfer Acreage
4028	Belke-Churchill	1,801							
4029	Callahan	809			200	9	200	9	
4030	Callahan-Matthews	67							
4031	Goose Creek-Fairchild	720							
4032	Hedges	180							
4033	Matthews-Churchill	120							
4034	Martin Goose Creek	327							
4035	Matthews-Goose Creek	820	120	24					
4036	Willow Creek-Anderson	851							
4037	Churchill-Matthews	1,476	40	3					
4038	Goose Creek-McIntosh	86							
4039	Big Cedar-Churchill	364			364	28			
4040	Rich Creek	695	520	96					
4041	Land Creek Iso.	40							
4042	Fairchild Canyon	40			40	4	40	4	
4043	Land Creek	466			276	38			
4044	Mill Creek	240							
4045	Two Knobs	80							
4046	Pine Knob	399			40	4	40	4	
4047	Lunch Creek	2,009							
4048	Crystal	1,111							
4049	Marsh Creek	221							
4050	Howell Creek	840							
4051	Sibley	724							
4052	Conner Creek	2,262							
4053	South Conner	480							
4054	Rocky Hollow	280							
4055	Middle Hill	2,647	40	3					
4056	Grape Creek	916							
4057	Cove	400			260	18	260	18	
4058		21,205	720	126	1,180	101	540	35	

Management Area 8				A				8				C				0			
No.	Name	Inventoried Federal Acres	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	
5024	Almo Creek	320																	
5025	Graham Creek	845																	
5026	Emery Creek	679																	
5027	Circle Creek	1,068																	
5028	Junction Creek	184																	
5029	Trail Canyon	1,640																	
5030	Tracy Lane	1,880																	
5031	Heath Canyon	1,464																	
5032	Smoky Mountain	1,335																	
5033	Moulton	383																	
5034	State Line	305																	
5035	Sparks Basin	1,919																	
5036	Junction Seeding	6,520																	
5037	Almo	80																	
5038		17,622																	
Management Area 9				A				8				C				0			
No.	Name	Inventoried Federal Acres	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	
5020	Idaho Iso.	780																	
5037	Almo Flat	1,174	40	9	960	209	960	209	960	209	320	0	320	0					
5038	Cole Lane	624			624	131	624	131	624	131									
5039	Gully	4,515																	
5040	Johnson Creek	2,080																	
5041	E-Y Flat	4,818																	
5042	George Creek	2,747																	
5043	Narrows Seeding	3,807																	
5044	State Spring	1,008																	
5045	Clear Creek	10,240																	
5046	Ward E-Y	960																	
5047	South Bridge	1,056	1,056	0	320	0	320	0	320	0	320	0	320	0					
5048	Nar	734	400	0	734	78	734	78	734	78									
5050	Glen	160			160	27	160	27	160	27									
5320	Warm Creek	24,039																	
5326	Point Springs	8,227			16,440	2,652													
5328	Point	12,786																	
5330	Sandrock	3,144																	
5331	Bridge	11,856																	
5332	Strevell	6,049	830	18	830	22	830	22	830	22									
5333	Green Canyon	442			442	0	442	0	442	0									
5336	Raft River Iso. #2	518																	
5338	Sublett Road Triangle	603			603	0	40	0											
5339	H P & P	283																	
5340	Round Mountain	296			296	0	240	0	240	0									
5341	Valley	320			320	0	320	0	320	0									
5342	Railroad Grade	492																	
5343	Landing Field	960			800	0													
5344	OOE	560																	
5345	Strip	280			280	0	280	0	280	0									
5346	Cemetery	160			160	0	160	0	160	0									
5347	Idaho Interchange	90			90	0													
		105,808	21,155	2,679	6,270	707	6,110	693	320	0									
Management Area 10				A				8				C				0			
No.	Name	Inventoried Federal Acres	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	
5003	Jim Sage	66,417	80	4	505	29	240	14	240	10									
5004	Cassia Creek	3,902	280	50															
5005	Almo-Monack	4,195																	
5006	Chokecherry	737																	
5051	Keogh	1,046	360	54	505	29	230	14	230	10									
		76,297																	
Management Area 11				A				8				C				0			
No.	Name	Inventoried Federal Acres	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	
5001	North Cottrell	9,946	80	10	80	11	80	11	80	11									
5002	South Cottrell	29,517	3,080	273	3,080	26	240	26	240	26									
5003	Wright Station	1,044	1,044	0															
5057	Wright Station	40,507	4,204	283	320	37	320	37	320	37									
Management Area 12				A				8				C				0			
No.	Name	Inventoried Federal Acres	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	
5301	Highway Common	22,656																	
5303	West Toews	1,777																	
5304	East Toews	1,074																	
5305	Kunau	5,927																	
5306	No Mans Land	3,020																	
5307	Basalt Seeding	3,005																	
5308	Raft River	5,683																	
5309	Yale	3,527	40	8	40	11	40	11	40	11									
		45,669																	
Management Area 13				A				8				C				0			
No.	Name	Inventoried Federal Acres	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	
5313	Chapin	2,575																	
5314	Dairy Springs	8,998							480	48	480	48							
5315	Warm Springs	2,220							170	33									
5321	Antelope	3,699																	
5322	Shirley Creek	680																	
5323	North Lake Fork	1,233																	
5324	South Lake Fork	1,079																	
5325	Sublett	743																	
5327	Meadow Creek	13,372							80	13	80	13							
5328	Point	5,755																	
5348	Burnt Canyon	240																	
		40,594																	
Management Area 14				A				8				C				0			
No.	Name	Inventoried Federal Acres	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	Transfer Acreage	AUMs	
4025	Simon Baker	120																	
4094	Churchill-Poulton	240																	
4133	Churchill Tracts	80																	
5054	Idaho Wildlife	280																	
5310	Gifford Springs	240																	
5311	Horse Butte	358																	
5312	Raft River Iso. #1	80							358	0									
5337	Raft River Iso. #3	200							200	0									
1031	Golden Valley Iso. Tract	40																	
1032	Churchill Tract	1,678							558	0									

Alternative A

Management				Designations	
No.	Acres	Motorcycle	4-Wheel	Snowmobile	
1	1,875	LERT	LERT	LERT	
2	180	C	C	C	
3	35,666	LERT	LERT	LERT	
4	12,728	LERT	LERT	LERT	
5	17,582	LERT	LERT	LERT	
6	9,686	LERT	LERT	LERT	
7	34,592	LERT	LERT	LERT	
8	6,076	LERT	LERT	LERT	
9	19	0	0	0	
10	3,711	0	0	0	
11	19,513	0	0	0	
12	1,787	0	0	0	
13	15,729	0	0	0	
14	520	LERT	LERT	LERT	
15	1,628	LERT	LERT	LERT	
16	98,516	0	0	0	
17	8,227	LERT	LERT	LERT	
18	36,657	0	0	0	
19	12,780	0	0	0	
20	17,250	LERT	LERT	LERT	
21	10,000	LERT	LERT	LERT	
22	34,554	LERT	LERT	LERT	
23	6,413	LERT	LERT	LERT	
24	45,894	0	0	0	
25	35,110	0	0	0	
26	5,614	0	0	0	
27	160	0	0	0	
28	3,806	LERT	LERT	LERT	

Alternative B

Management				Designations	
No.	Acres	Motorcycle	4-Wheel	Snowmobile	
1	2,055	0	LDR	0	
2	48,394	0	0	0	
3	27,268	0	0	0	
4	40,668	0	0	0	
5	19	0	0	0	
6	3,711	LDR	LDR	0	
7	21,300	0	0	0	
8	17,877	0	0	0	
9	96,516	0	0	0	
10	8,227	LERT	LERT	LERT	
11	2,000	LERT	LERT	LERT	
12	76,687	0	0	0	
13	40,967	LERT	LERT	LERT	
14	45,894	0	0	0	
15	40,884	0	0	0	
16	3,786	LERT	LERT	LERT	
17	20	0	0	0	

Alternative C

Management				Designations	
No.	Acres	Motorcycle	4-Wheel	Snowmobile	
1	2,055	LDR	LDR	LDR	
2	48,394	0	0	C	
3	27,268	LERT	LERT	0	
4	40,188	LERT	LERT	0	
5	480	C	C	C	
6	19	0	0	0	
7	3,711	0	0	0	
8	21,300	0	0	0	
9	17,877	LERT	LERT	LERT	
10	96,516	0	0	0	
11	8,227	LERT	LERT	LERT	
12	2,000	LERT	LERT	LERT	
13	76,687	LERT	LERT	LERT	
14	40,967	LERT	LERT	LERT	
15	45,894	0	0	0	
16	40,884	0	0	0	
17	3,806	LERT	LERT	LERT	

Alternative D and Sub Alternative D

Management				Designations	
No.	Acres	Motorcycle	4-Wheel	Snowmobile	
1	2,055	LDR	LDR	LDR	
2	48,394	LERT	LERT	C	
3	27,268	LERT	LERT	LOR	
4	40,188	LERT	LERT	C	
5	480	C	C	C	
6	19	0	0	0	
7	3,711	LERT	LERT	C	
8	21,300	LERT	LERT	C	
9	17,877	LERT	LERT	C	
10	106,743	LERT	LERT	LERT	
11	52,607	LERT	LERT	C	
12	24,080	C	C	C	
13	40,967	LERT	LERT	C	
14	36,379	0	0	0	
15	1,160	C	C	C	
16	8,355	LERT	LERT	0	
17	40,884	LERT	LERT	LOR	
18	3,806	LERT	LERT	LERT	

ORV Designations:

0 - Open
 LERT - Limited to Existing Roads and Trails
 LDR - Limited to Designated Routes
 C - Closed

APPENDIX L

Off-Road Vehicle Designations by Management Area

APPENDIX M

Proposed Five Year Sale Plan (Based on Preferred Alternative C)

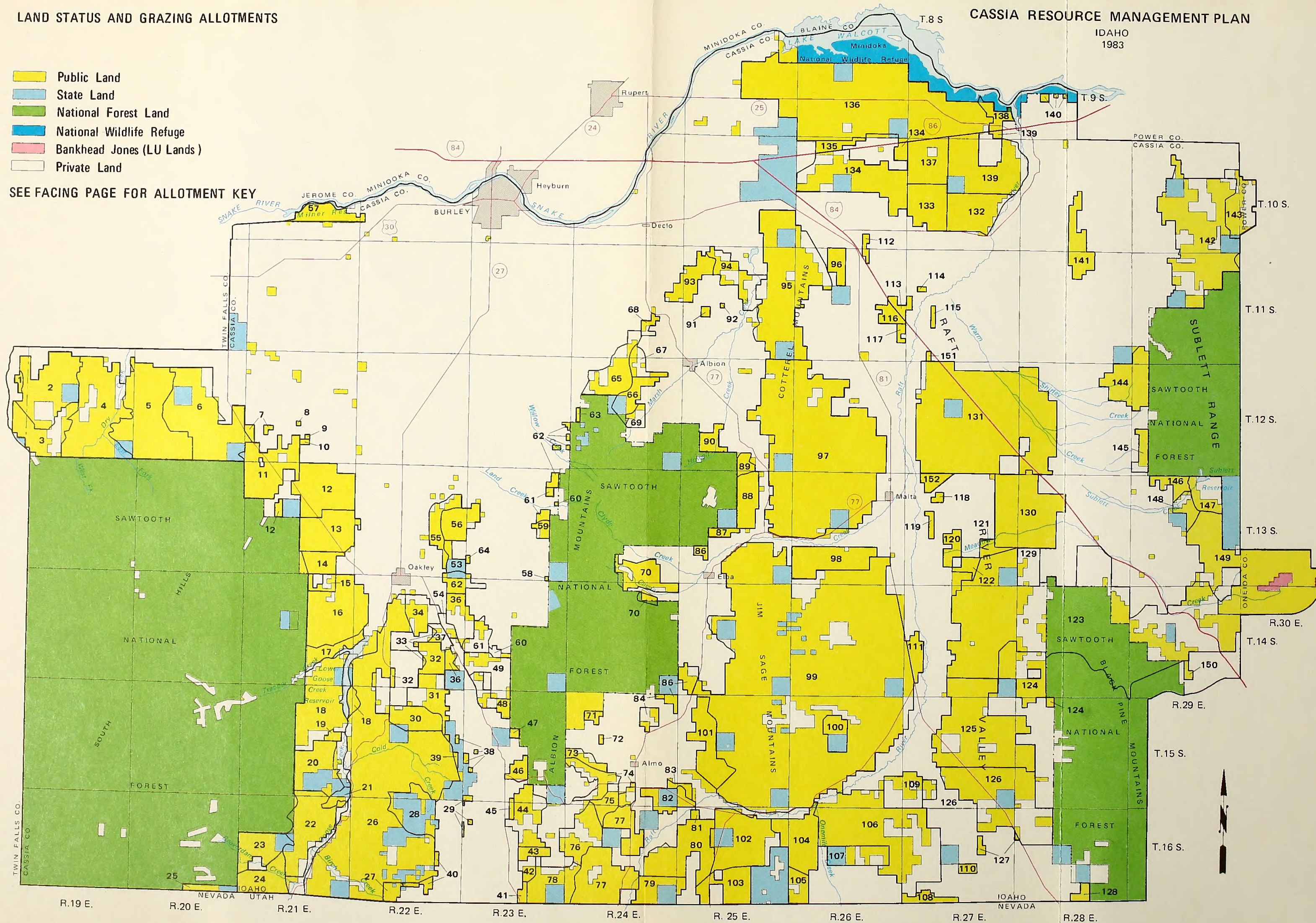
Year	Legal Description	Acres	Geographic Location
1984	T. 13 S., R. 25 E., Sec. 24: SW1/4NW1/4	40	1/2 mile E. of Conner on State Route 77
	T. 16 S., R. 24 E., Sec. 12: NW1/4NW1/4	40	3 miles SW. of Almo
		<u>80</u>	
1985	T. 11 S., R. 26 E., Sec. 17: N1/2NE1/4	80	E. side of Cotterel Mt. 5 miles NNW. of Idaho
	T. 13 S., R. 23 E., Sec. 35: SE1/4SE1/4	40	7 1/2 miles E. of Oakley on Basin Road
	T. 13 S., R. 28 E., Sec. 23: SW1/4NW1/4	40	2 1/2 miles SSW. of Sublett adjacent to Interstate 84
	T. 13 S., R. 29 E., Sec. 29: SW1/4NW1/4	40	4 miles SSE. of Sublett in the Cold Spring Creek area
	Sec. 31: SW1/4NE1/4	40	5 miles SSE. of Sublett adjacent to Interstate 84
	T. 14 S., R. 23 E., Sec. 10: SW1/4SW1/4	40	6 miles ESE. of Oakley
		<u>280</u>	
1986	T. 15 S., R. 24 E., Sec. 11: N1/2SW1/4, SE1/4SW1/4	120	2 miles N. of Almo
	Sec. 27: SW1/4SE1/4	40	1 miles S. of Almo
	T. 15 S., R. 28 E., Sec. 31: Lot 4	60	5 miles N. of Strevell east of State Route 81
		<u>220</u>	
1987	T. 13 S., R. 26 E., Sec. 25: SE1/4NW1/4	40	3 1/2 miles S. of Malta adjacent to State Route 81
	T. 13 S., R. 27 E., Sec. 8: NE1/4, SE1/4NW1/4	200	2 1/2 miles E. of Malta
	Sec. 17: N1/2NW1/4, SE1/4NW1/4, E1/2SW1/4	200	2 1/2 miles SE. of Malta
	Sec. 20: E1/2NW1/4	80	3 1/2 miles SE. of Malta
		<u>520</u>	
1988	T. 12 S., R. 24 E., Sec. 3: SE1/4NE1/4	40	2 1/2 miles E. of Albion
		<u>40</u>	
Total Acres		1,140	

This plan is subject to change depending on the Final Cassia Resource Management Plan selected for implementation.

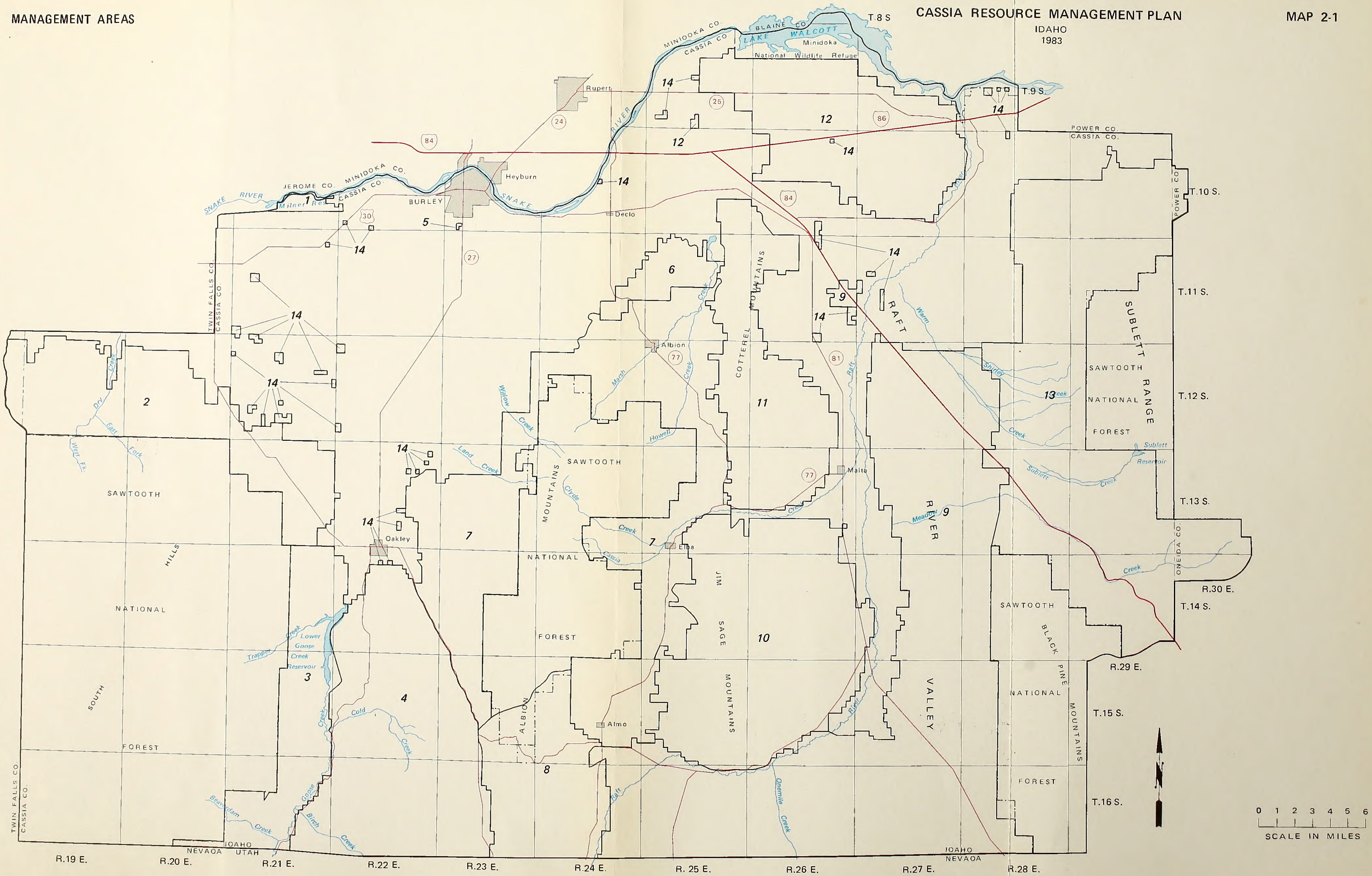
KEY TO ALLOTMENTS

Map Ref. No.	Allot. No.	Allot. Name	Map Ref. No.	Allot No.	Allot. Name
1	4071	Artesian-Kidd ISO	77	5036	Junction Seeding
2	4069	Artesian-Kidd	78	5035	Sparks Basin
3	4032	Dry Creek - Artesian	79	5040	Johnson Creek
4	4068	Dry Creek	80	5039	Gully
5	4081	Cold Spring	81	5050	Glen
6	4067	Buckhorn - Churchill	82	5037	Almo Flat
7	4025	Simon Baker	83	5038	Cole Lane
8	1032	Churchill Tract	84	5023	Cove
9	1031	Golden Valley ISO	85	5022	Grape Creek
10	4133	Churchill Tracts	86	5019	Rocky Hollow
11	4094	Churchill - Poulton	87	5018	South Conner
12	4110	Pickett - Wake	88	5017	Conner Creek
13	4075	Marion Group	89	5016	Sibley
14	4087	Churchill-Mullen	90	5015	Howell Creek
15	4088	Goose Creek - Mullen	91	5052	North Albion
16	4111	Warr - Pickett	92	5049	Marsh Creek ISO
17	4078	Mabey Goose Creek	93	5007	Water Canyon
18	4093	Goose Creek - Poulton	94	5009	Bridger Canyon
19	4105	Day	95	5001	North Cotterel
20	4104	Baker	96	5057	Weigh Station
21	4100	North Emery	97	5002	South Cotterel
22	4103	Shoulder "3" Inc.	98	5004	Cassia Creek
23	4099	Beaver Dam	99	5003	Jim Sage
24	4026	Bruce Bedke - Private	100	5006	Chokecherry
25	4029	Karl E. Bedke Goose Cr.	101	5005	Almo - Womack
26	4027	Goose Creek Group	102	5041	E - Y Flat
27	4070	Worthington Springs	103	5042	George Creek
28	4134	Robinson Hole	104	5043	Narrows Seeding
29	4120	Junction Valley Parcels	105	5044	State Spring
30	4117	Goose Cr. Private No. 1	106	5045	Clear Creek
31	4112	Alastra	107	5046	Ward E - Y
32	4113	Earl Whiteley	108	5048	Naf
33	4127	Stone Cabin ISO	109	5047	South Bridge
34	4116	Marchant - Goose Creek	110	5341	Valley
35	4033	Callahan	111	5051	Keogh
36	4062	Harper - Goose Creek	112	5311	Horse Butte
37	4052	Critchfield - Indiv.	113	5336	Raft River ISO No. 2
38	4140	Birch Creek Parcels	114	5312	Raft River ISO No. 1
39	4090	Goose Creek	115	5337	Raft River ISO No. 3
40	4089	Goose Creek - Ward	116	5020	Idahome ISO
41	5034	State Line	117	5054	Idahome Wildlife
42	5033	Moulton	118	5346	Cemetery
43	5030	Tracy Lane	119	5345	Strip
44	5029	Trail Canyon	120	5343	Landing Field
45	5028	Junction Creek	121	5344	DOE
46	5026	Emery Creek	122	5342	Railroad Grade
47	4061	Hedges	123	5328	Point
48	4118	Birch Creek	124	5330	Sandrock
49	4082	Matthews - Goose Creek	125	5331	Bridge
50	4086	Goose Creek - McIntosh	126	5332	Strevell
51	4080	Martin Goose Creek	127	5340	Round Mtn.
52	4056	Goose Creek - Fairchild	128	5333	Green Canyon
53	4131	Mill Creek	129	5339	HP & P
54	4034	Callahan - Matthews	130	5326	Point Springs
55	4084	Churchill - Matthews	131	5320	Warm Creek
56	4028	Bedke - Churchill	132	5309	Yale
57	4065	Milner - Holyoak	133	5307	Basalt Seeding
58	4129	Fairchild Canyon	134	5305	Kunau
59	4115	Big Cedar - Churchill	135	5303	West Toews
60	4128	Land Cr. ISO	136	5301	Highway Common
61	4130	Land Creek	137	5306	No Mans Land
62	4083	Willow Creek - Anderson	138	5304	East Toews
63	4064	Matthews - Churchill	139	5308	Raft River
64	4132	Two Knobs	140	5310	Gifford Springs
65	5012	Lunch Creek	141	5313	Chapin
66	5013	Crystal	142	5314	Dairy Springs
67	5011	Pine Knob	143	5315	Warm Springs
68	5010	View	144	5321	Antelope
69	5014	Marsh Creek	145	5322	Shirley Creek
70	5021	Middle Hill	146	5323	North Lake Fork
71	5024	Almo Creek	147	5325	Sublett
72	5053	Almo	148	5324	South Lake Fork
73	5025	Graham Creek	149	5327	Meadow Creek
74	5027	Circle Creek	150	5348	Burnt Canyon
75	5032	Smoky Mtn.	151	5347	Idahome Interchange
76	5031	Heath Canyon	152	5338	Sublett Road Triangle

- SEE FACING PAGE FOR ALLOTMENT KEY

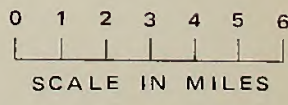
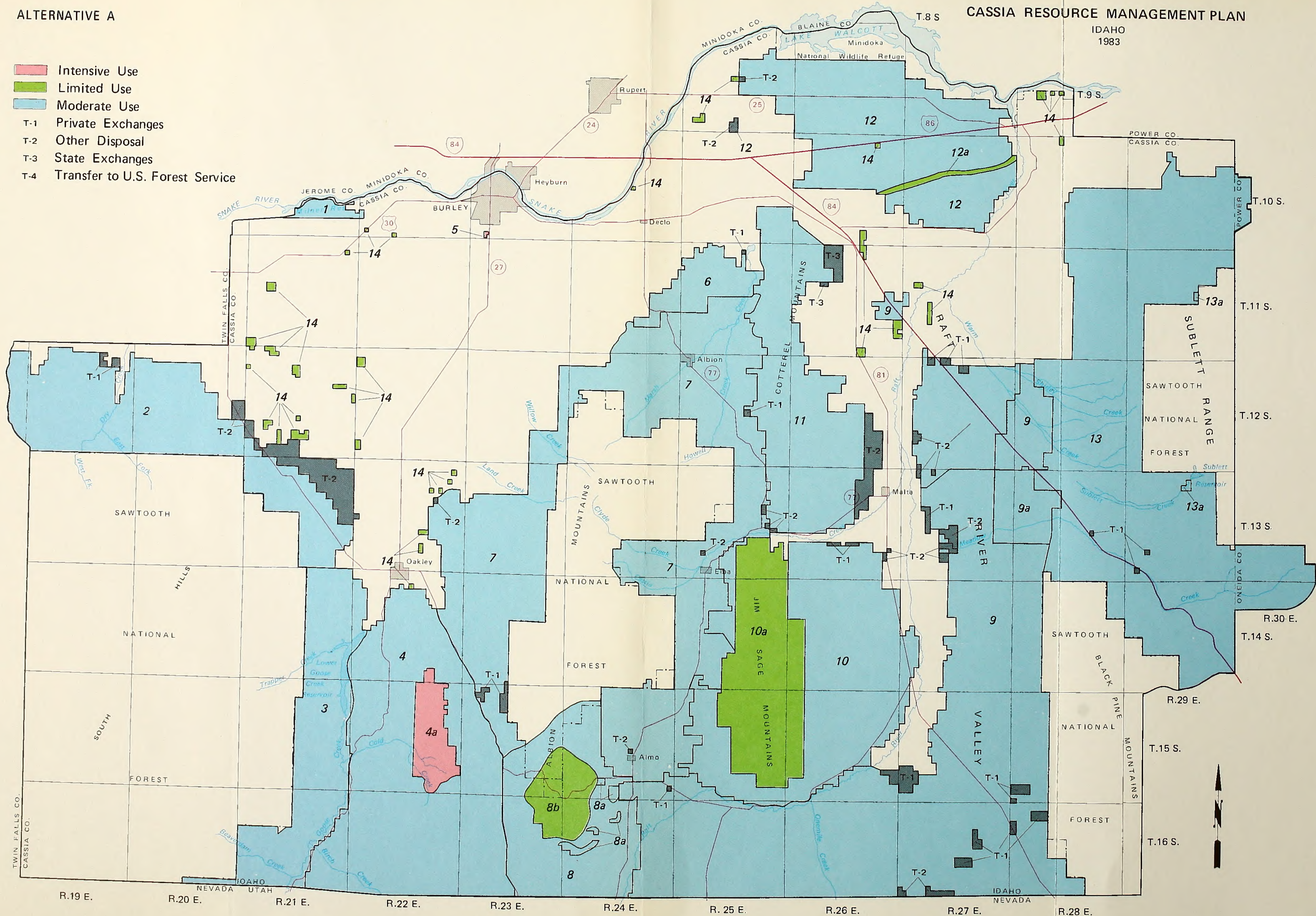


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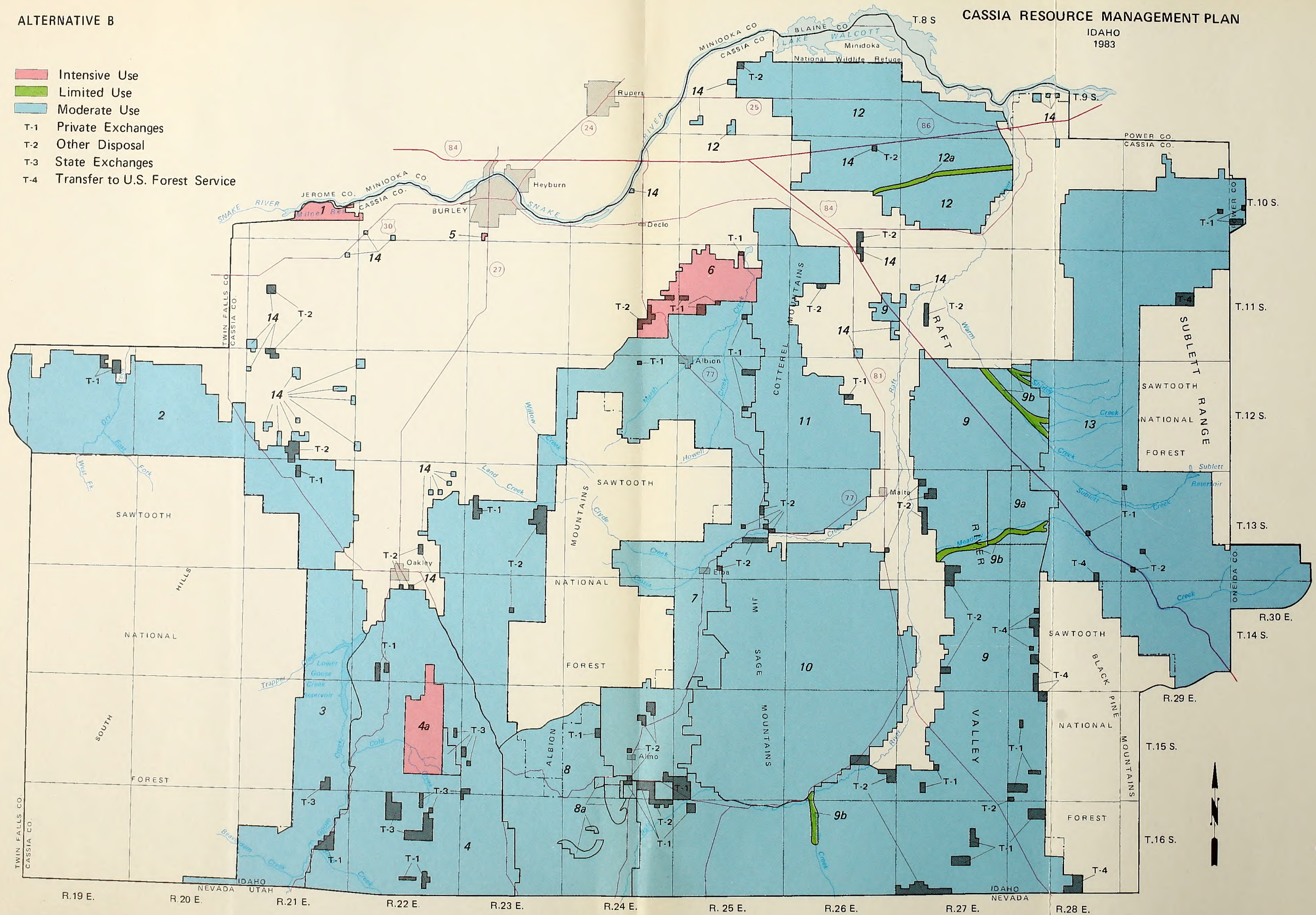


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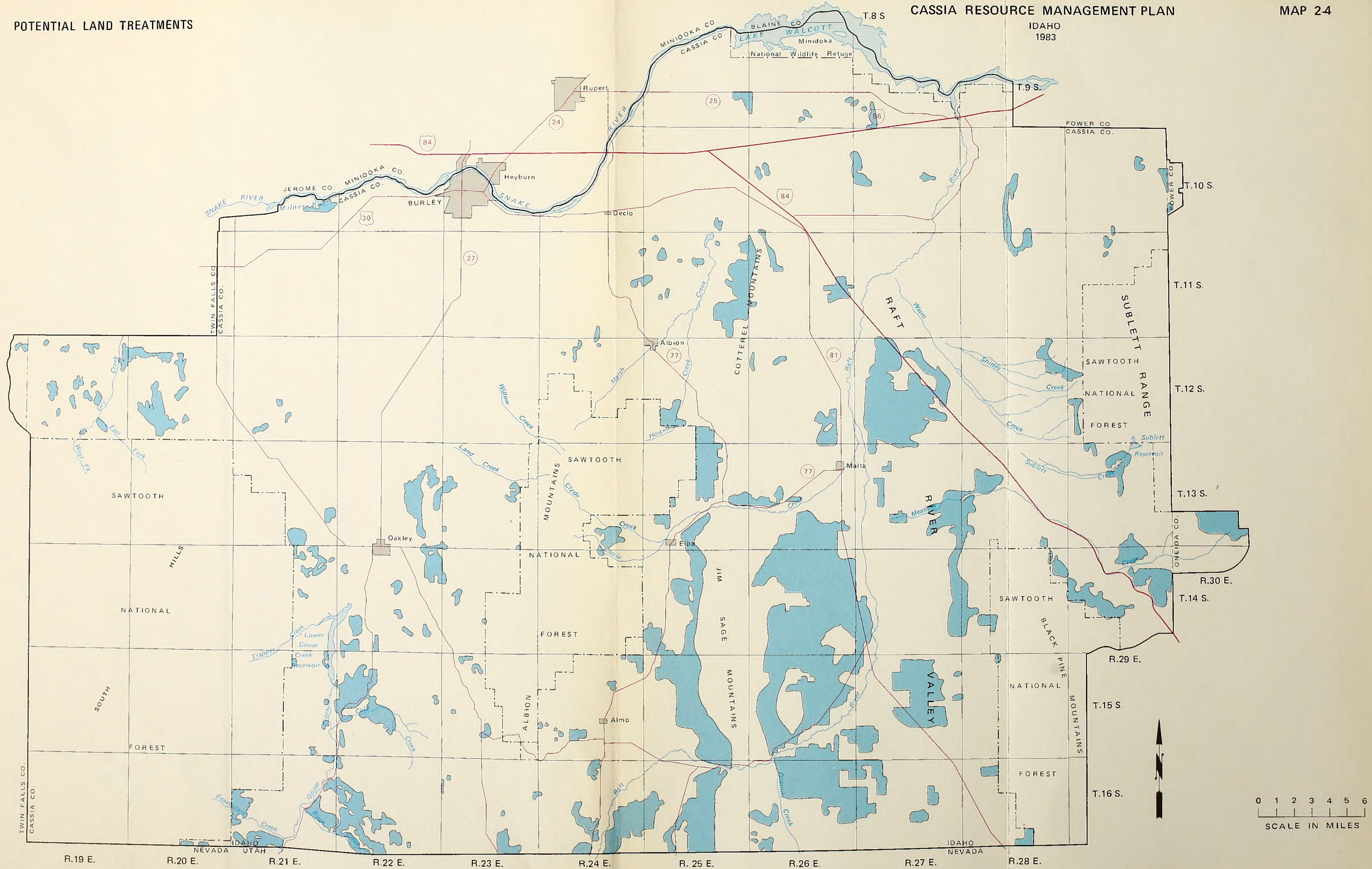
- Intensive Use
- Limited Use
- Moderate Use
- T-1 Private Exchanges
- T-2 Other Disposal
- T-3 State Exchanges
- T-4 Transfer to U.S. Forest Service



- Intensive Use
- Limited Use
- Moderate Use
- T-1 Private Exchanges
- T-2 Other Disposal
- T-3 State Exchanges
- T-4 Transfer to U.S. Forest Service

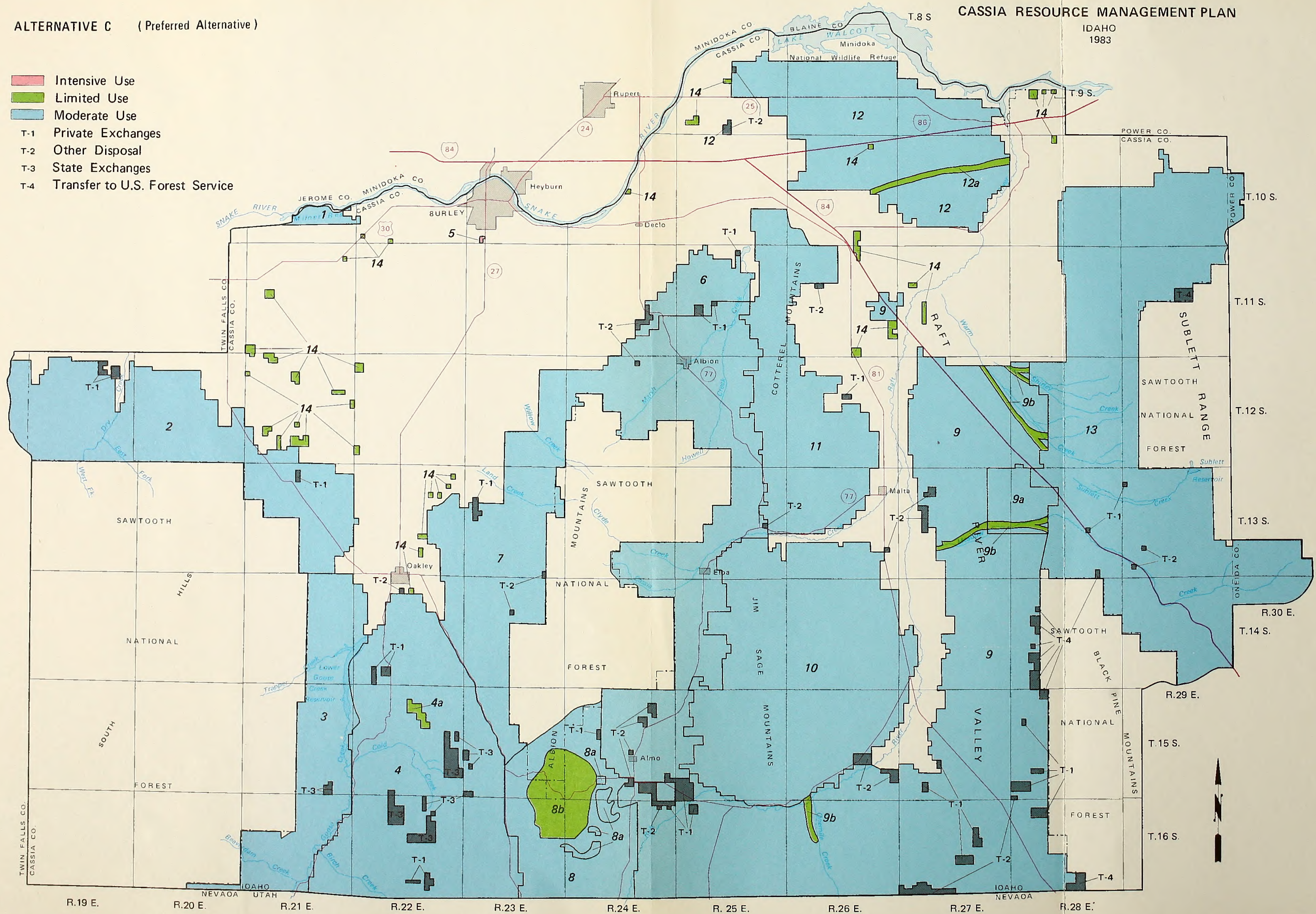


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Intensive Use
 Limited Use
 Moderate Use

T-1 Private Exchanges
 T-2 Other Disposal
 T-3 State Exchanges
 T-4 Transfer to U.S. Forest Service

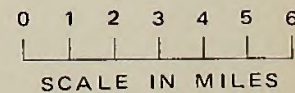
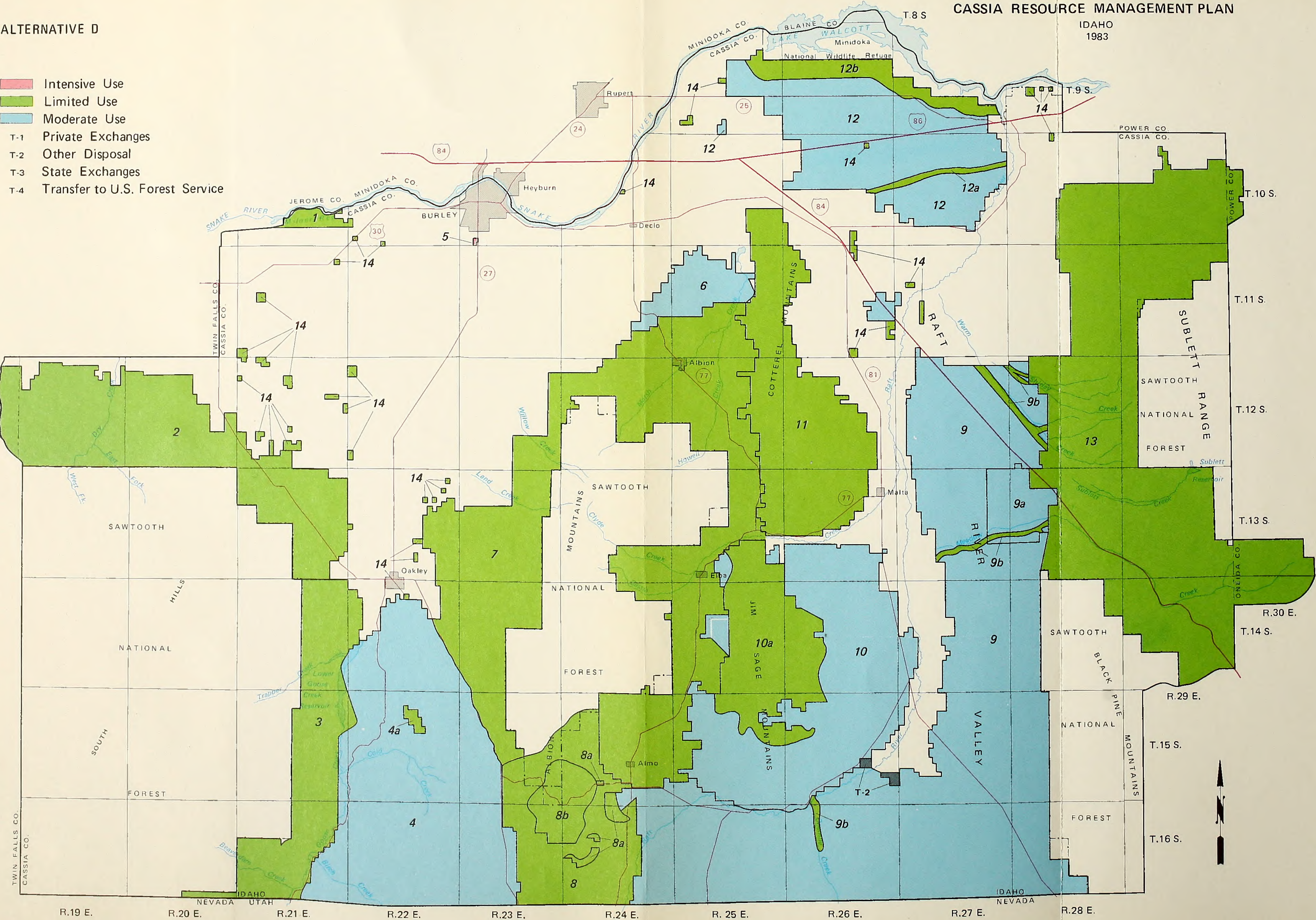


ALTERNATIVE D

CASSIA RESOURCE MANAGEMENT PLAN

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- Intensive Use
- Limited Use
- Moderate Use
- T-1 Private Exchanges
- T-2 Other Disposal
- T-3 State Exchanges
- T-4 Transfer to U.S. Forest Service



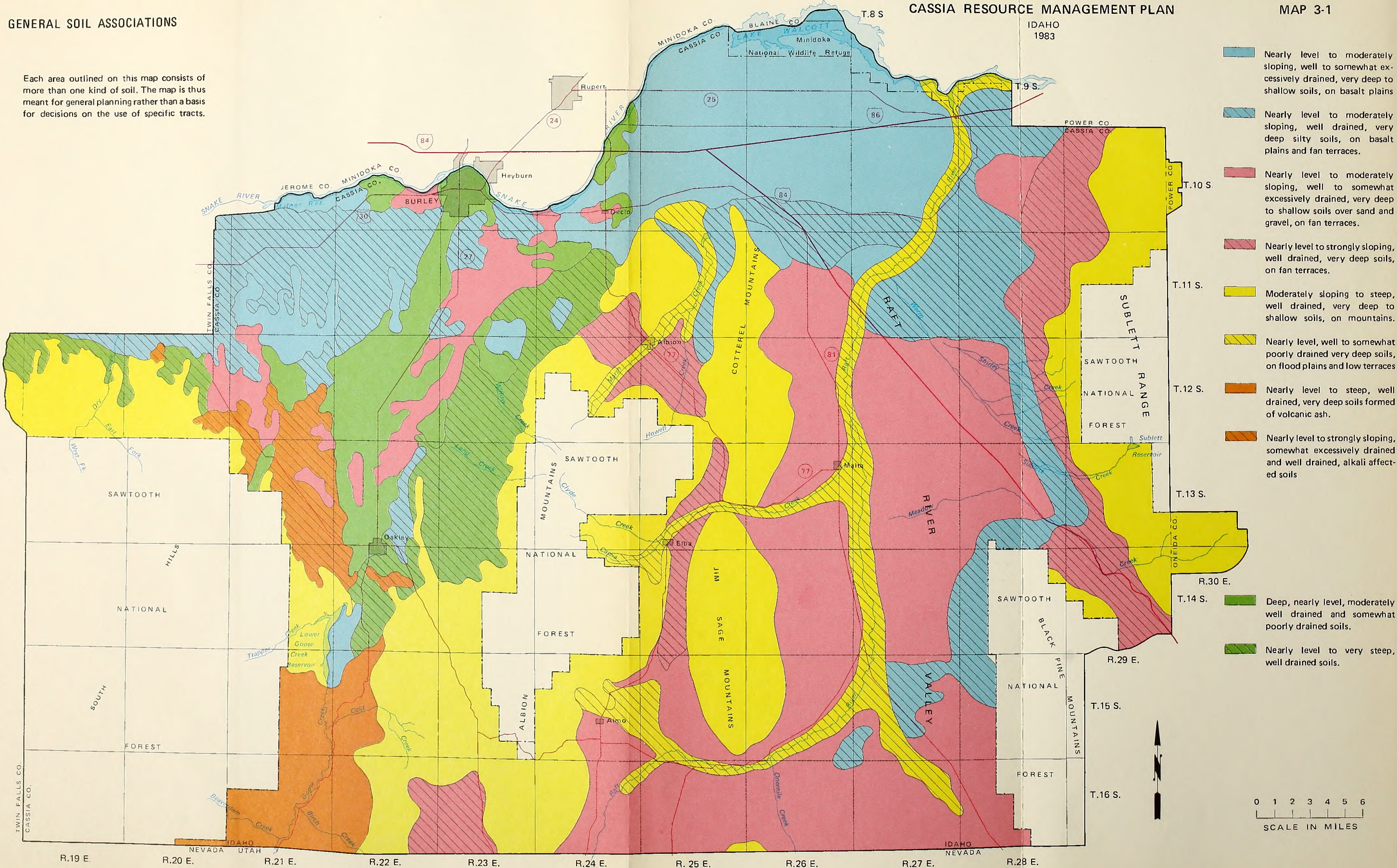
GENERAL SOIL ASSOCIATIONS

Each area outlined on this map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.

CASSIA RESOURCE MANAGEMENT PLAN

MAP 3-1

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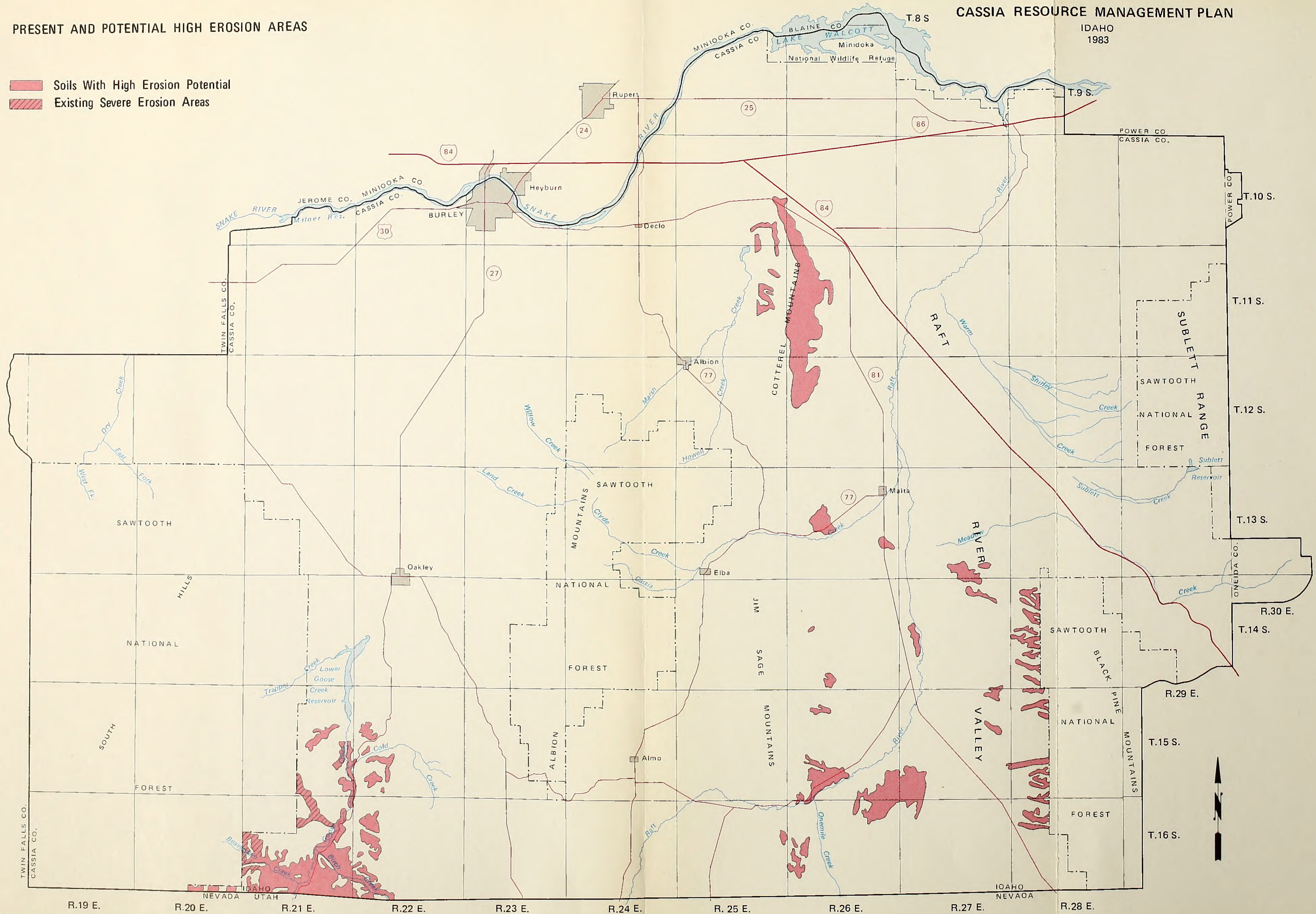
PRESENT AND POTENTIAL HIGH EROSION AREAS

- Soils With High Erosion Potential
- Existing Severe Erosion Areas

CASSIA RESOURCE MANAGEMENT PLAN

MAP 3-2

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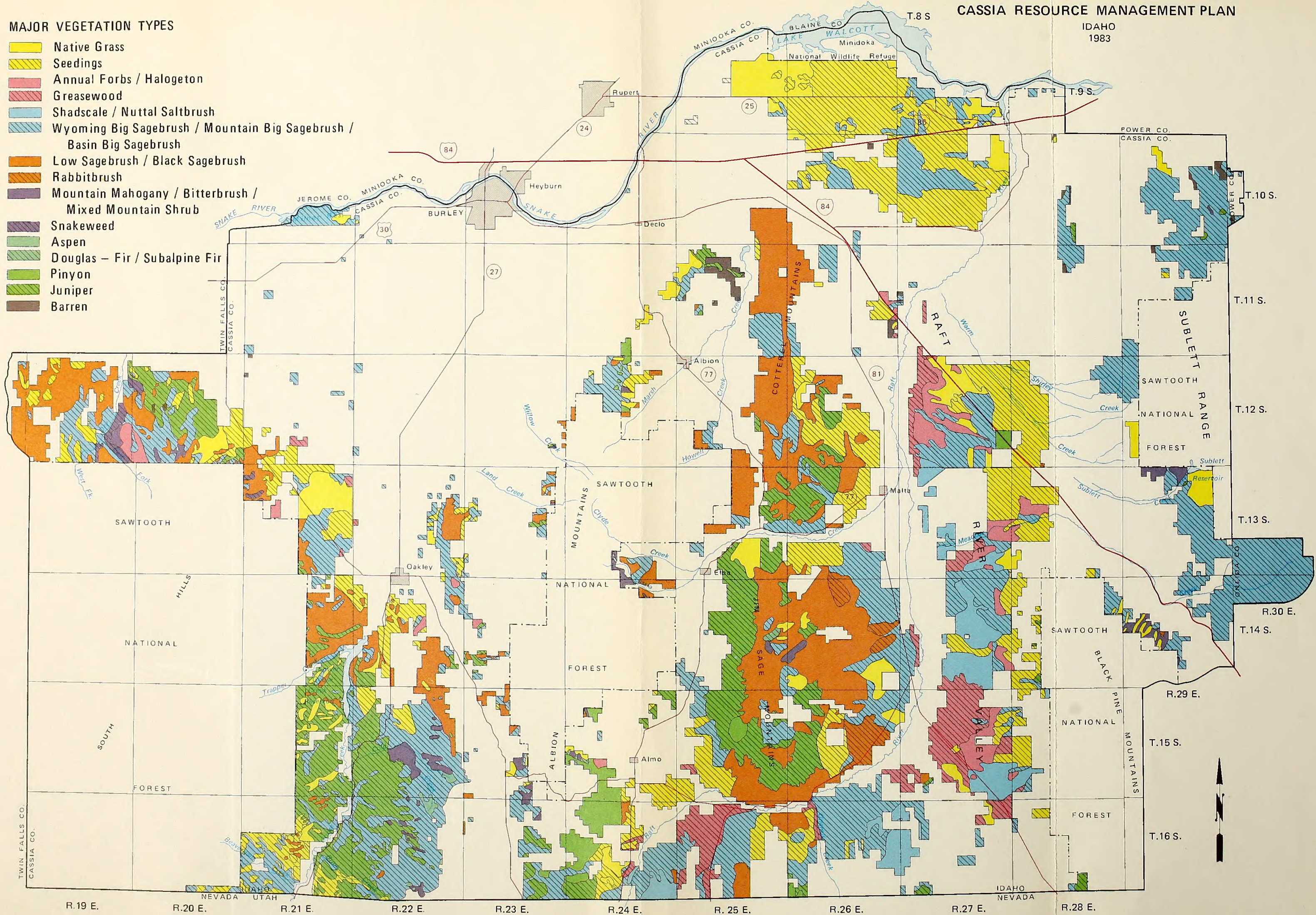
MAJOR VEGETATION TYPES

- Native Grass
- Seedings
- Annual Forbs / Halogeton
- Greasewood
- Shadscale / Nuttal Saltbrush
- Wyoming Big Sagebrush / Mountain Big Sagebrush / Basin Big Sagebrush
- Low Sagebrush / Black Sagebrush
- Rabbitbrush
- Mountain Mahogany / Bitterbrush / Mixed Mountain Shrub
- Snakeweed
- Aspen
- Douglas - Fir / Subalpine Fir
- Pinyon
- Juniper
- Barren

CASSIA RESOURCE MANAGEMENT PLAN

MAP 3-3

IDAHO
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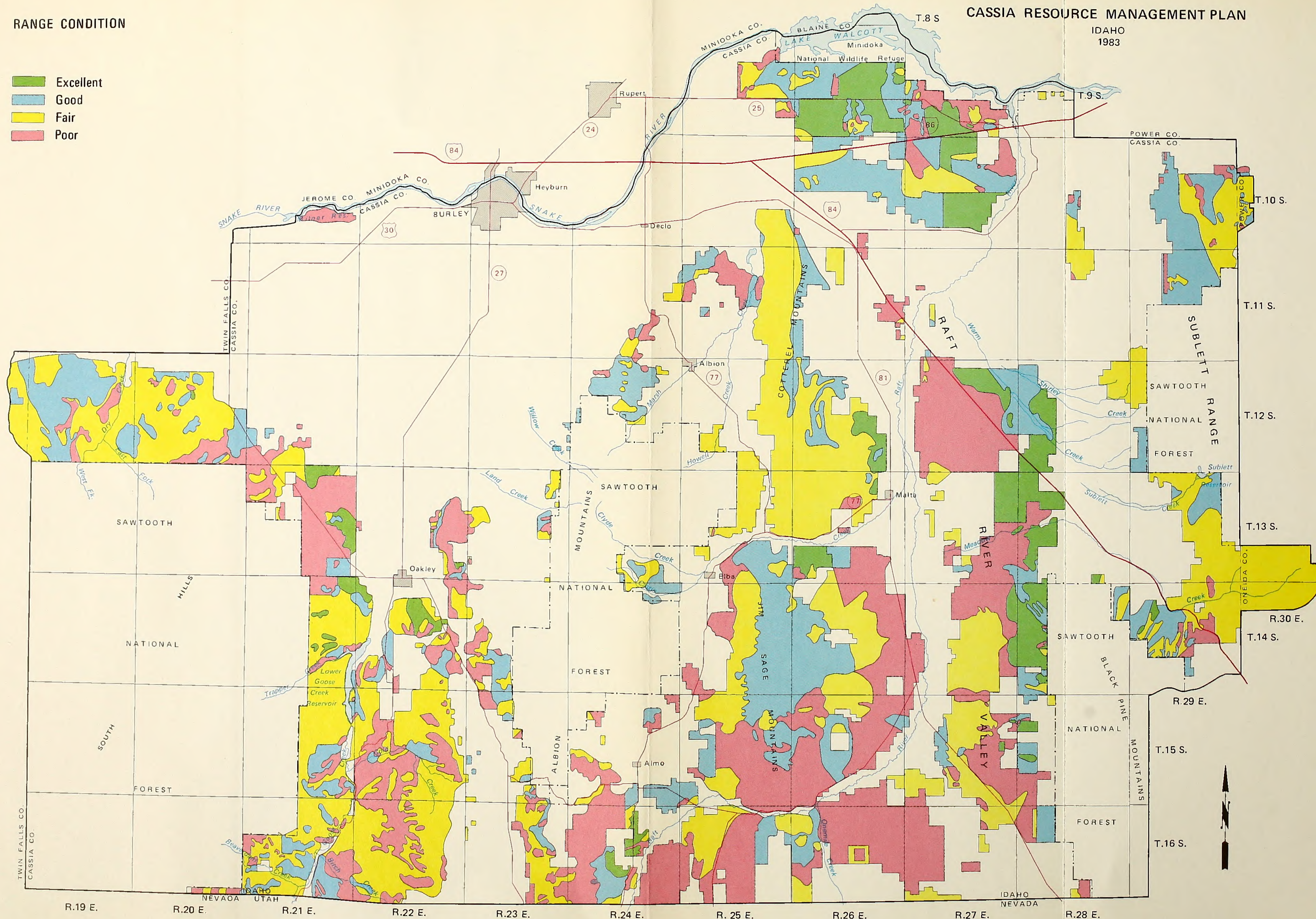
RANGE CONDITION

- Excellent
- Good
- Fair
- Poor

CASSIA RESOURCE MANAGEMENT PLAN

MAP 3-4

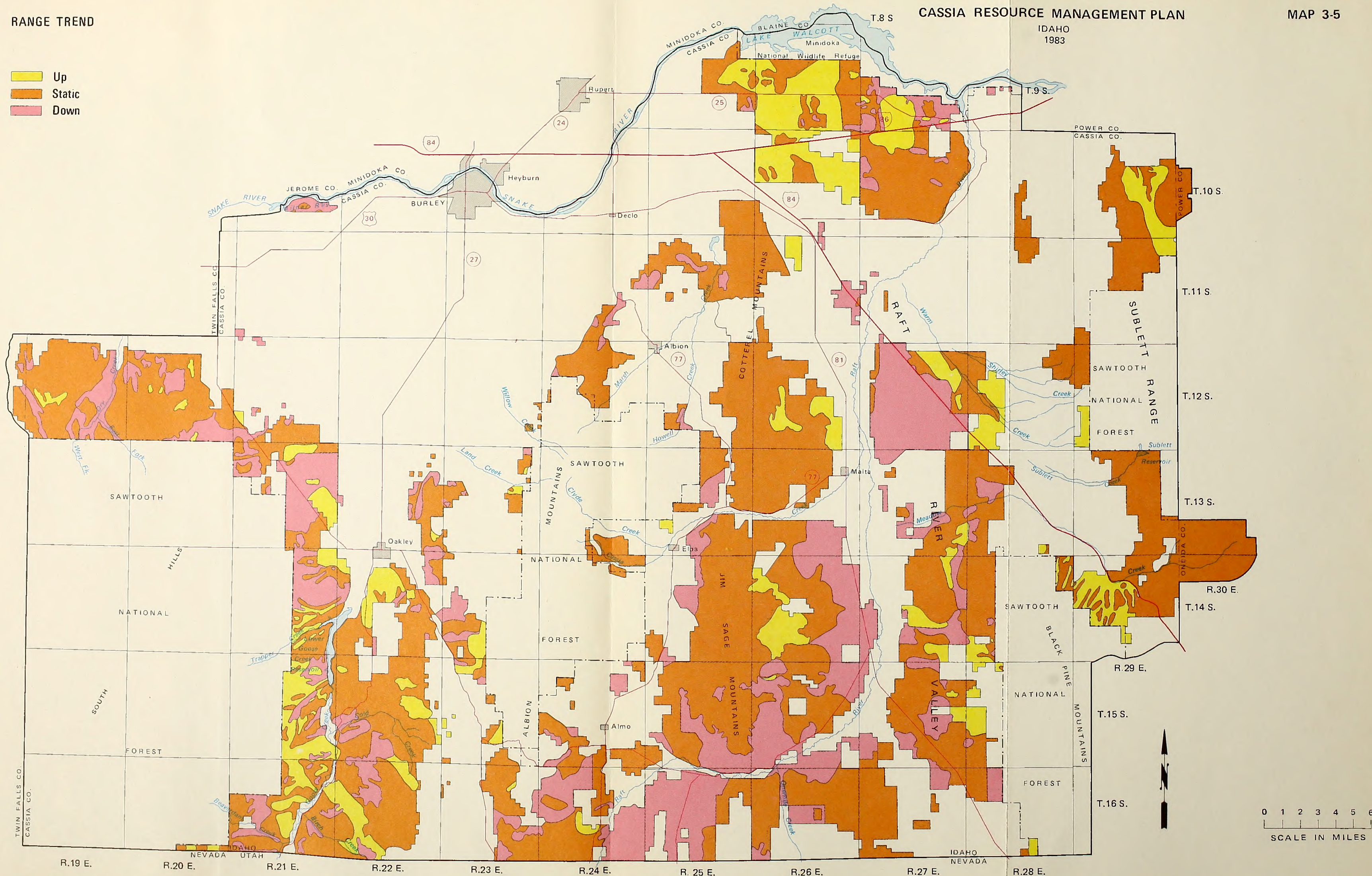
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0 1 2 3 4 5 6
SCALE IN MILES

- Up
- Static
- Down

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1983



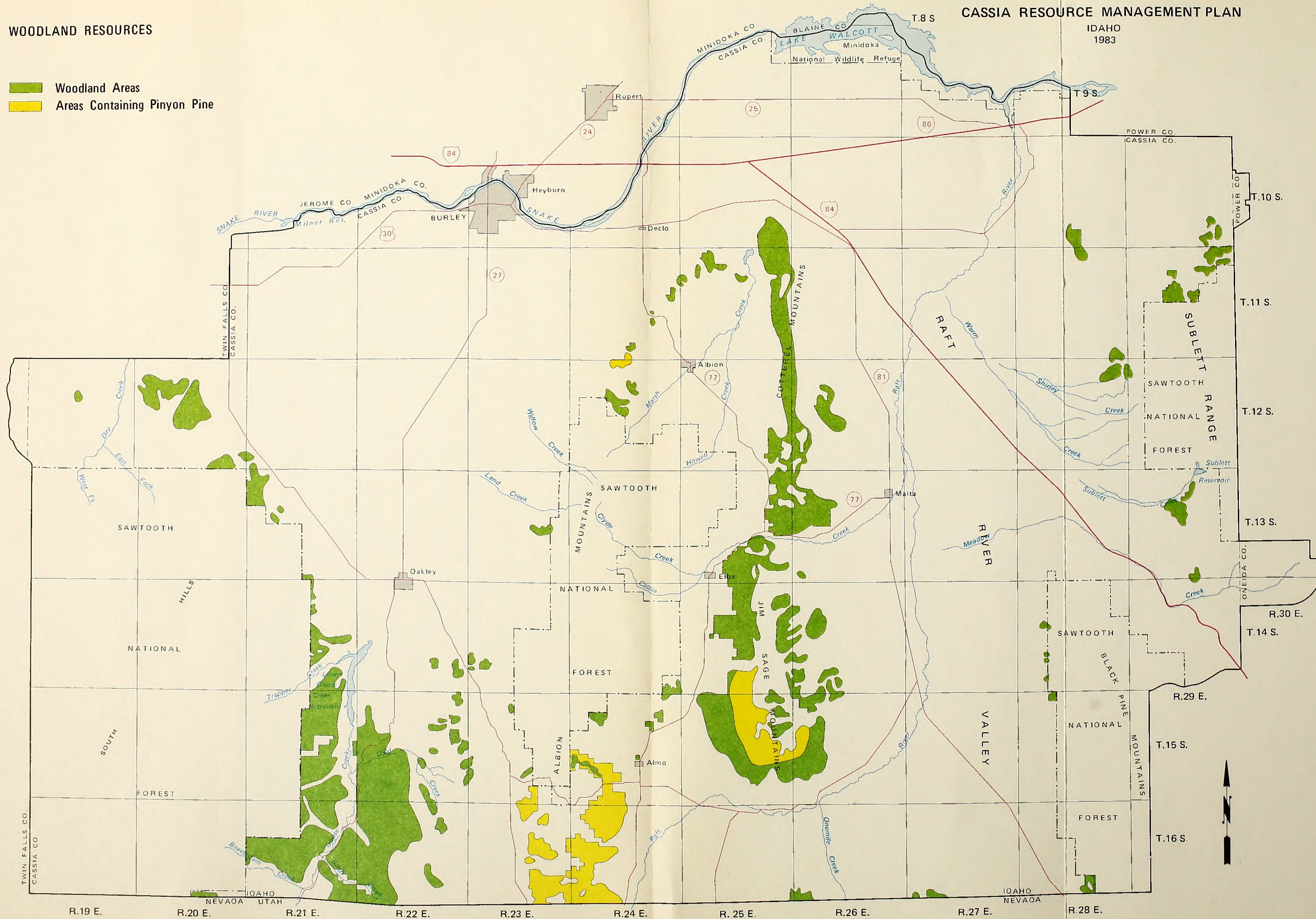
WOODLAND RESOURCES

- Woodland Areas
- Areas Containing Pinyon Pine

CASSIA RESOURCE MANAGEMENT PLAN

MAP 3-6

IDAHO
1983



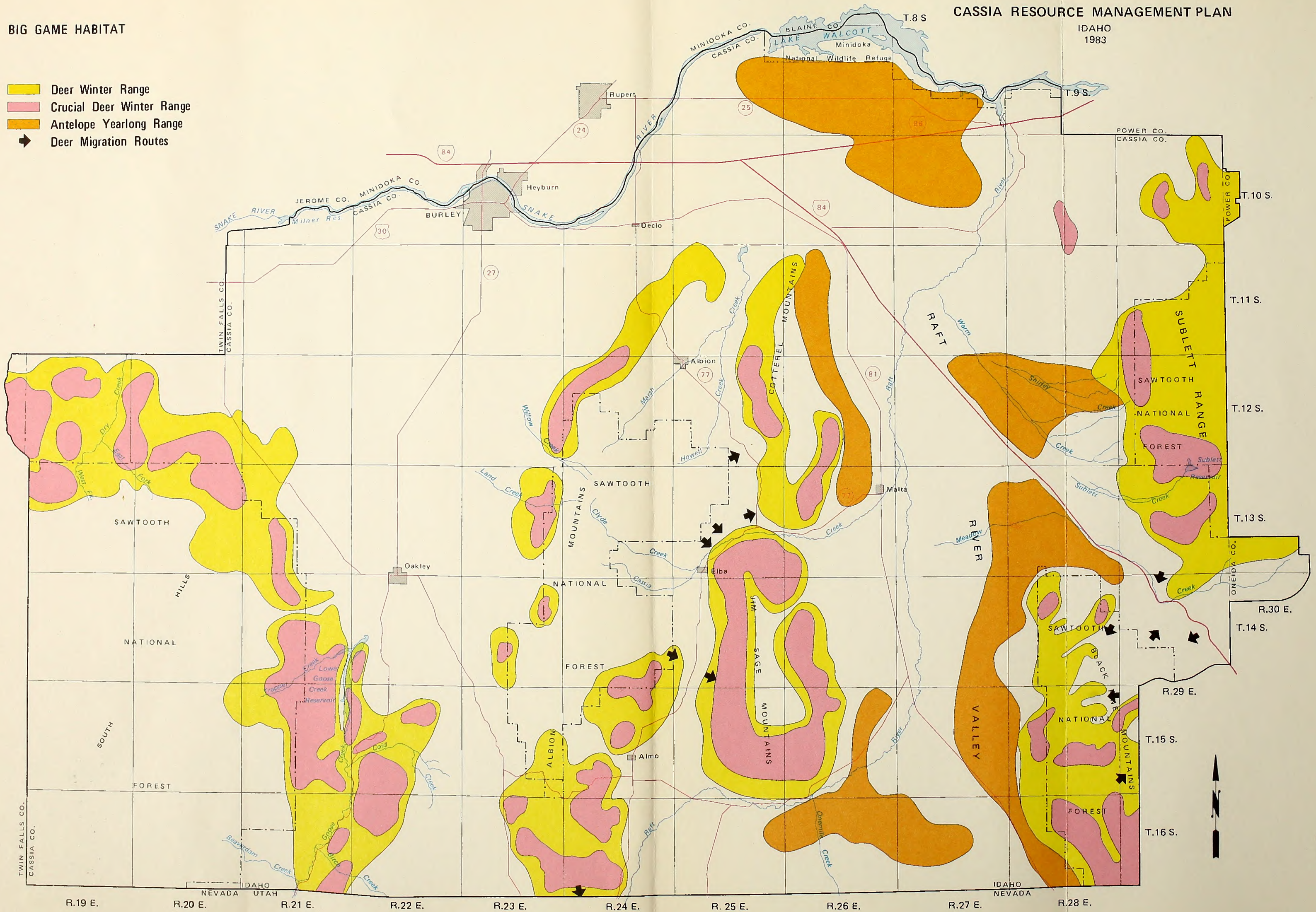
BIG GAME HABITAT

- Deer Winter Range
- Crucial Deer Winter Range
- Antelope Yearlong Range
- Deer Migration Routes

CASSIA RESOURCE MANAGEMENT PLAN

MAP 3-7

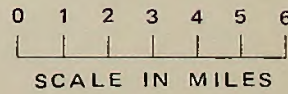
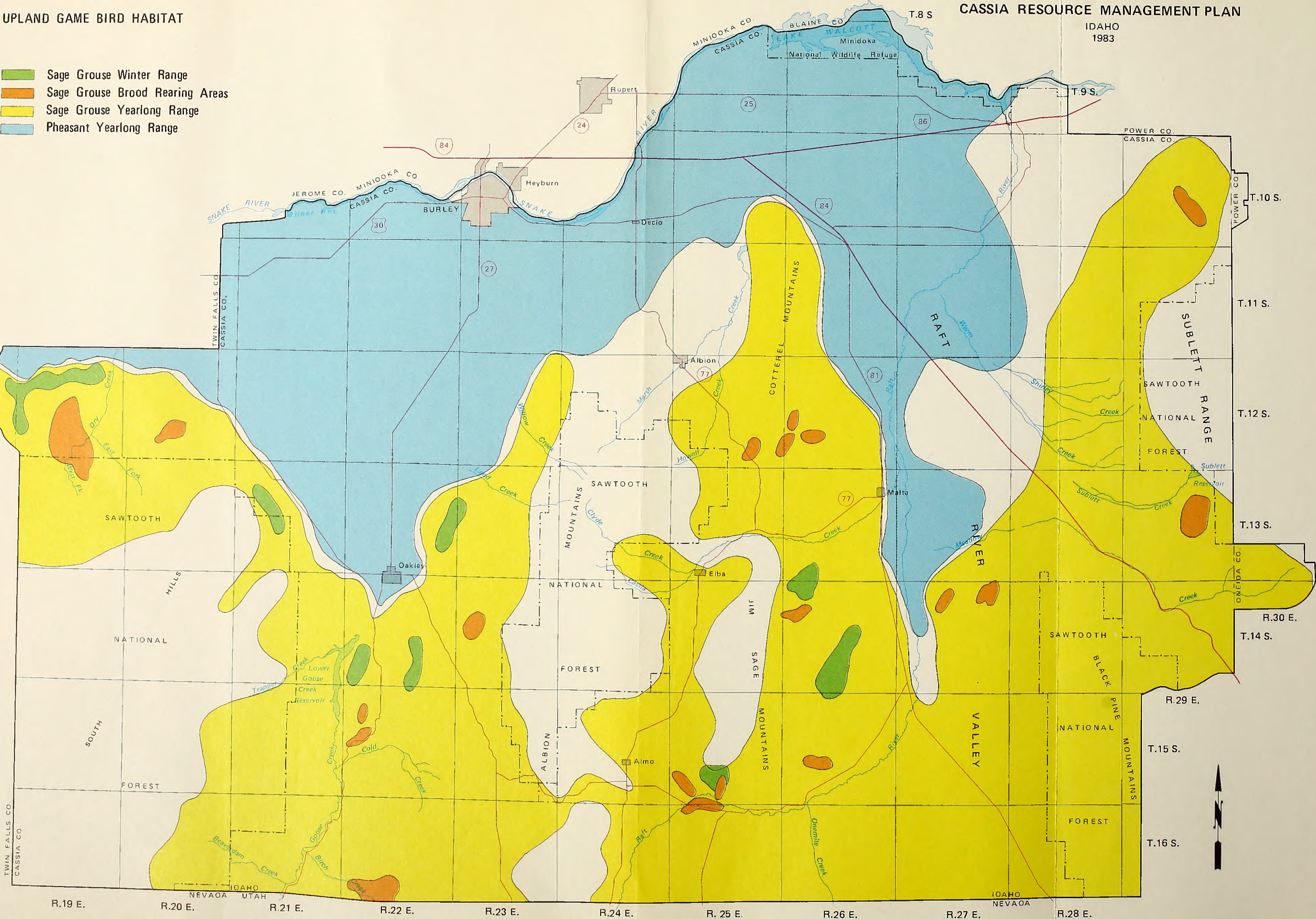
IDAHO
1983



0 1 2 3 4 5 6
SCALE IN MILES

IDAHO
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- Sage Grouse Winter Range
- Sage Grouse Brood Rearing Areas
- Sage Grouse Yearlong Range
- Pheasant Yearlong Range

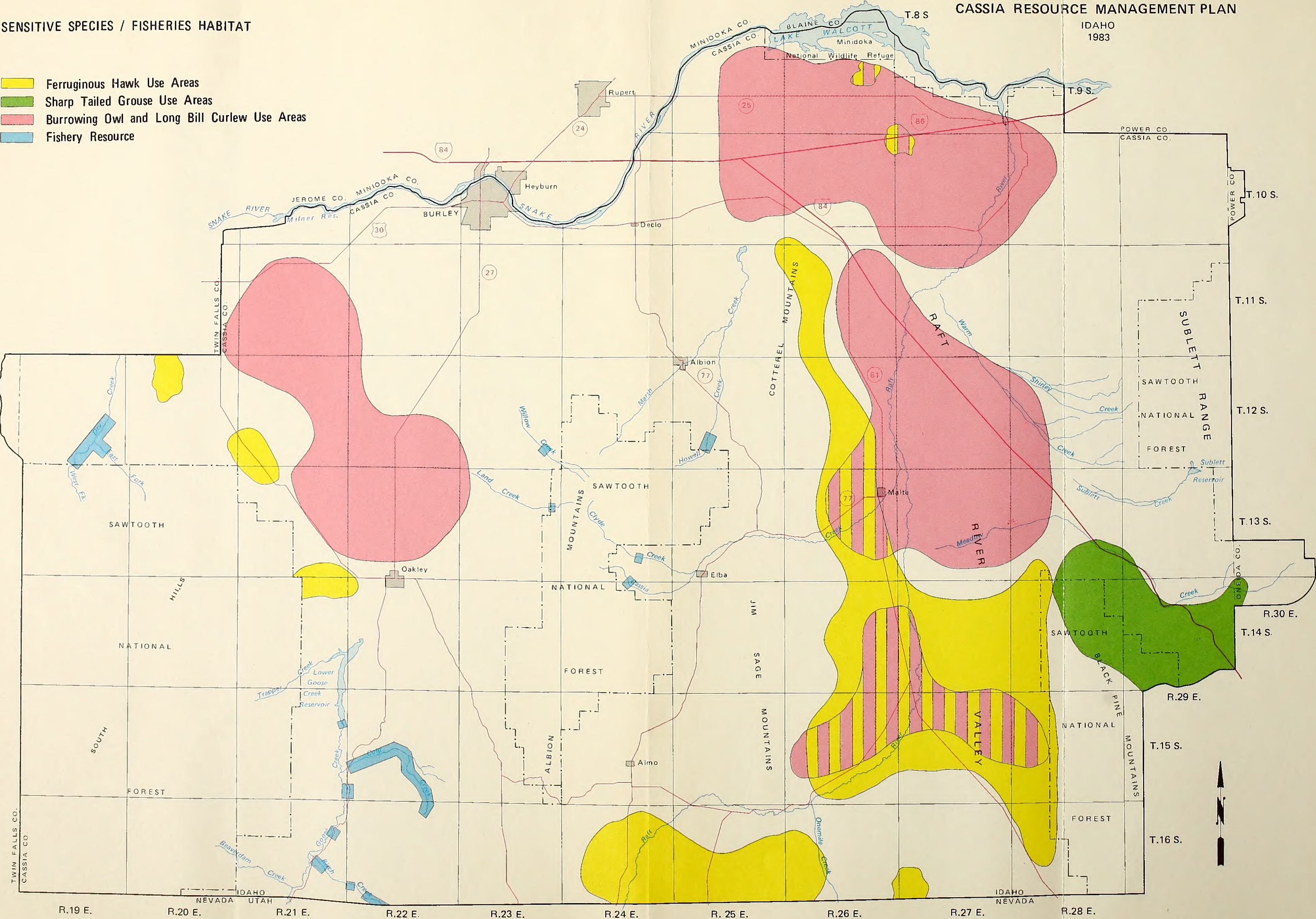


SENSITIVE SPECIES / FISHERIES HABITAT

CASSIA RESOURCE MANAGEMENT PLAN

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- Ferruginous Hawk Use Areas
- Sharp Tailed Grouse Use Areas
- Burrowing Owl and Long Bill Curlew Use Areas
- Fishery Resource



0 1 2 3 4 5 6
SCALE IN MILES

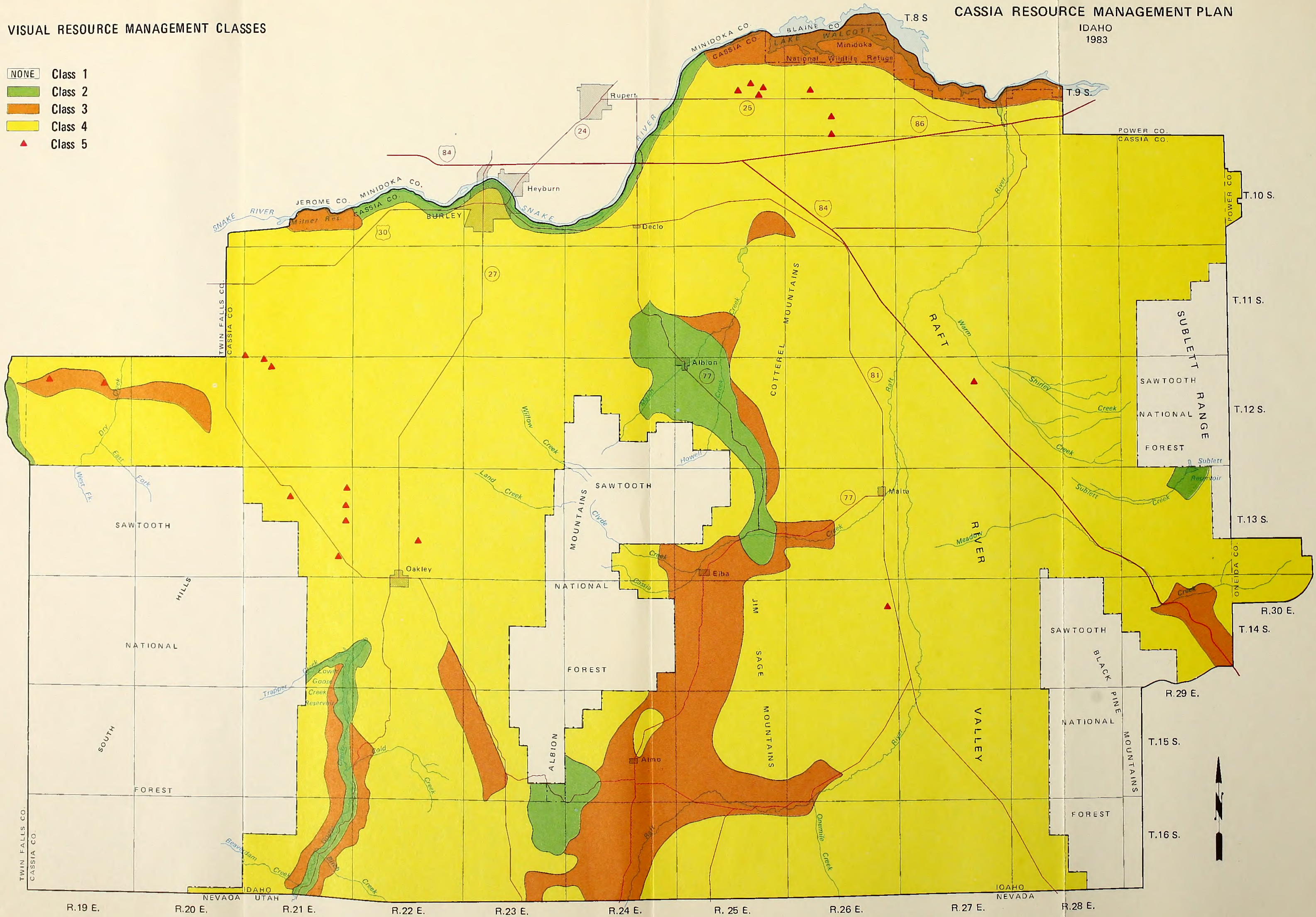
VISUAL RESOURCE MANAGEMENT CLASSES

- NONE Class 1
- Class 2
- Class 3
- Class 4
- Class 5

CASSIA RESOURCE MANAGEMENT PLAN

MAP 3-10

IDAHO
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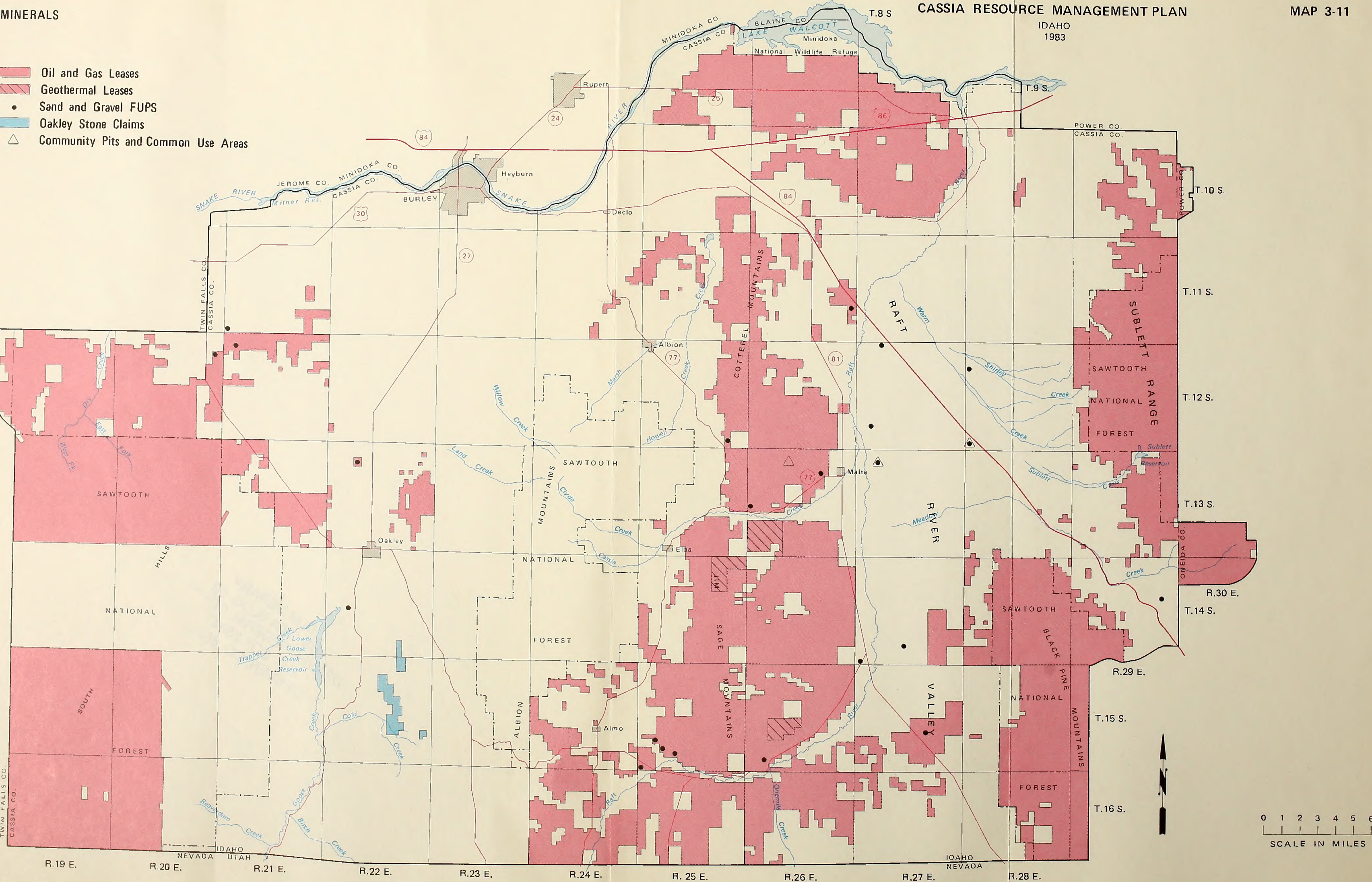
MINERALS

- Oil and Gas Leases
- Geothermal Leases
- Sand and Gravel FUPS
- Oakley Stone Claims
- Community Pits and Common Use Areas

CASSIA RESOURCE MANAGEMENT PLAN

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MAP 3-11



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